London School of Economics and Political Science

Reaching out to the persistently poor in rural areas: An analysis of Brazil's Bolsa Família conditional cash transfer programme

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DECLARATION OF AUTHORSHIP

I certify that the thesis I have presented for examination for the MPhil/PhD degree of the London School of Economics and Political Science is solely my own work other than where I have clearly indicated that it is the work of others (in which case the extent of any work carried out jointly by me and any other person is clearly identified in it).

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ABSTRACT

The *Bolsa Família* (BF) is considered to be a well-targeted cash transfer programme for poor families, with benefits conditional on meeting health and educational requirements. Extreme poverty in Brazil is concentrated in rural areas, and is highest among those who rely on agriculture in historically underprivileged areas of the semi-arid interior. Although there is no comprehensive study of chronic poverty in Brazil due to lack of longitudinal datasets, one can infer that, the more remote small, poor rural municipalities are, the higher is the probability of persistent and severe poverty. Therefore, it is questionable whether the BF, with conditionalities attached to frequently limited services, is the most appropriate social protection policy for reaching the working-age able-bodied rural poor living in isolated areas.

I identified the rural poor in remote and non-remote municipalities using geographical information systems. In this thesis, through four pieces of analytical work, I thus investigate how effectively the BF programme reaches the persistently poor in remote and non-remote rural municipalities.

First, I used quantitative methods to investigate whether BF participation rates are higher in poor remote rural municipalities. Second, based on a qualitative analysis of eight interviews at the federal administration level, I investigated the question of whether the policy design and national implementation considered how to reach the persistently poor in remote rural areas. Third, I examined how local administration ensured that the persistently poor were given priority in the implementation. I conducted 14 interviews in four case studies, two in remote and two in non-remote poor rural municipalities. Lastly, I analysed how the rural poor took up benefits with 22 household interviews in rural villages.

This thesis concludes that, despite the BF's cost-efficiency, it does not effectively address the needs of the persistently poor living in remote rural municipalities, where services are non-existent, difficult to access, and of low quality.

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List of Acronyms

BF	*Bolsa Família*
BACEN	*Banco Central do Brasil*
BCIM	Digital Integrated Cartographic Base of Brazil at the Millionth Scale
BPC	*Benefício de Prestação Continuada*
CAIXA	*Caixa Econômica Federal*
CCT	Conditional Cash Transfer
CPF	*Cadastro de Pessoas Físicas*
CPRC	Chronic Poverty Research Centre
CRAS	*Centro de Referência de Assistência Social*
CREAS	*Centro de Referência Especializado de Assistência Social*
FGT	Foster-Greer-Thorbecke Indices
GDP	Gross Domestic Product
IBGE	*Instituto Brasileiro de Geografia e Estatística*
ICS	*Instância de Controle Social*
IFAD	International Fund for Agricultural Development
IGD	*Índice de Gestão Decentralizada*
ILO	International Labour Organization
IPEA	*Instituto de Pesquisa Econômica Aplicada*
MDA	*Ministério do Desenvolvimento Agrário*
MDG	Millennium Development Goals
MDS	*Ministério do Desenvolvimento Social e Combate à Fome*
MEC	*Ministério da Educação*
MME	*Ministério de Minas e Energia*
MoPI	*Mapa de pobreza e desigualdade: municípios brasileiros*
MPOG	*Ministério do Planejamento, Orçamento e Gestão*
MS	*Ministério da Saúde*
OECD	The Organisation for Economic Co-operation and

	Development
PACS	*Programa de Agentes Comunitários da Saúde*
PETI	*Programa de Erradicação do Trabalho Infantil*
PIR	Poor Isolated Rural municipality
PNAD	*Pesquisa Nacional por Amostra de Domicílio*
PNIR	Poor Non-Isolated Rural municipality
POF	*Pesquisa de Orçamentos Familiares*
PSF	*Programa Saúde da Família*
RMV	*Renda Mensal Vitalícia*
RRA	Rural Remote Area
SAGI	*Secretaria de Avaliação e Gestão da Informação*
SENARC	*Secretaria Nacional de Renda da Cidadania*
TCU	*Tribunal de Contas da União*

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1. INTRODUCTION

And if we Severinos
are all the same in life,
we die the same death,
the same Severino death.
The death of those who die
of old age before the thirty,
of an ambuscade before twenty,
of hunger a little daily.
(The Severino death
from sickness and from hunger
attacks at any age
even the unborn child.)

We are many Severinos
and our destiny's the same
(...) to try to bring to life
a dead and deader land,
to try to wrest a farm
out of burnt-over land.
But, so that Your Excellencies
Can recognize me better
(...) I will be the Severino
You'll now see emigrate.
(Melo Neto 1963 p.10)

João Cabral de Melo Neto's poem pictures the lives of the persistently poor living in rural areas in the Northeast of Brazil. For some, Melo Neto's description may come as a surprise, as it might seem to be more appropriate for poor countries, rather than Brazil which is a middle-income country with improving social indicators, and one of the emerging economies, with a GDP among the top ten in the world and a large democracy and one of the BRICS[1]. However, his description, although more than half a century old, continues to show similarities with the first-hand accounts reported in this thesis.

This thesis deals with several aspects of the poem: life accounts of the extended duration of severe poverty, inter-generational transmission of poverty, small farming in the semi-arid interior, migration and unfulfilled human potential – all of this related directly or indirectly to the land and location in which the rural poor live. As part of the social policy and development fields, this thesis analyses the role of the state in providing social assistance. It specifically investigates the *Bolsa Família*[2] programme in assisting the persistently poor living in remote rural poor areas.

This topic is of particular interest for several reasons. Although progress has been made in reducing poverty and achieving the United Nations Millennium Development Goals, more than two-thirds of the 1.4 billion in extreme poverty worldwide live in rural areas of developing countries (IFAD 2010 p.9). One-third of the extreme poor

[1] Brazil, Russia, China, India and South Africa.
[2] *Bolsa Família* means Family Grant.

are also chronic poor (Shepherd *et al.* 2014 p.15). The chronic or persistently poor are difficult to reach and generally live in resource-depleted areas. The incidence of poverty in Brazil is five times higher in rural than in urban areas. The semi-arid region of northeast Brazil has the "single largest concentration of rural poverty in Latin America" (IFAD 2011 p.2).

Chronic poverty is a "*portmanteau*" term, different disciplinary backgrounds and schools of thought can influence the way the terminology is used (Hulme & Shepherd 2003 p.404). In this thesis, chronic poverty is understood more broadly, as a contrast to transient poverty. There is an emerging body of literature that investigates chronic poverty focusing on the duration and persistency of multidimensional poverty and deprivations, differentiating between the "always/usually poor" from "the churning/occasionally poor" (CPRC 2005,2008a,2008b; Hulme *et al.* 2001; Hulme & Shepherd 2003). The focus of this work is on the rural poor who live in long-term, chronic, enduring, persistent, structural poverty in remote geographical areas.

The empirical identification of who the chronic poor are is still under-researched (Hulme & Shepherd 2003). In general, information on poverty dynamics is acquired through panel data methods, one-off indicators (e.g. nutritional indicators) or qualitative retrospective data (such as those used in participatory poverty assessments) (Addison *et al.* 2009). In this thesis, I do not use chronic poverty methods to investigate my hypothesis - i.e. that the long-term severe poverty in rural remote areas is likely to influence the effective implementation *Bolsa Família* programme - for the reasons outlined in subsequent paragraphs. I rely, instead, on four empirical pieces of research based on cross-sectional datasets and qualitative interviews in order to test, observe and produce evidence relating to this hypothesis. The research is based on the premise that persistent severe structural poverty is predominantly located in rural and remote areas of small municipalities in the Northeast of Brazil. This premise has been consistently validated through historic analysis of the implications of the Brazilian colonisation and republican processes (the exploratory sugar cane colonies of the Northeast, the establishment of the Portuguese Royal family in Rio, the rise of coffee plantations and the politics of oligarchies from the Southeast of Brazil) as well as contemporary social policy research based on cross-sectional datasets (Censuses, social indicators and surveys).

Since I do not use panel data or one-off indicators that would strictly identify the chronic poor, I opt to use instead the terminology "persistent" poverty throughout the thesis.

The intersection between chronic or persistent poverty and remote rural areas of Brazil has not been extensively researched for several reasons. First, there is a lack of quantitative longitudinal data. There are no panel data in Brazil that capture the duration of poverty for this sub-group. Existing surveys, like the National Household Surveys (PNADs[3]), are representative of states and macro-regions, not small municipalities. Municipalities are clustered, which is not informative for addressing problems of rural isolated small municipalities. Only the Census would have the level of geographical detailed required but it does not provide information on income or expenditure.

Another reason, based on my own experience, is the difficulty in researching rural remote areas. Investigating these areas is time- and resource-consuming. Rural remote areas, in general, do not provide services or offer facilities to ease the researcher's work. There were no hotels or restaurants in some of the rural villages, even municipalities, I visited. Trust and empathy were needed to build interpersonal relationships in order to start the research process.

Another reason may be the influence of the free-market schools of economic thought that underpin the neoliberal prescriptions of the 1980s. Those schools hold that less state interference in economic affairs would allow markets to redistribute goods and services in the most efficient way. The general economic improvement would "trickle down" to society, and areas that are lagging behind would eventually catch-up. The focus of analysis, therefore, should be on how to generate, improve and sustain economic growth. It should not be on regional development state-led initiatives.

The quest for public efficiency and economic growth led to the monitoring of aggregate averages and short-term measurable outputs. With this rationale, rapid urbanisation has shifted the policy attention to urban areas. However, the current levels of poverty in rural areas calls for rapid and emergency policy attention.

[3] *Pesquisa Nacional por Amostra de Domicílios.*

Aggregate averages and short-term analysis do not provide the informational basis and the time-frame for dealing with rural poverty.

I do not disregard the role of economic growth or the need to address society's aggregate/average illnesses. This thesis, though, brings an alternative social policy analysis to the prevailing evaluations that measure success by looking at averages, government efficiency and short-term measurable outputs. Going beyond averages and unveiling local policy effects and households' histories to understand the effectiveness of these programmes in addressing the local needs, mainly in these "hard to reach" places, are also important elements of policy analysis.

As Titmuss (1974) states,

> the end-results of the work of administrators and professionals in the social services are less susceptible (if susceptible at all) to quantification and measurement than the work of managers in the private sector. (Titmuss 1974 p.52)

Titmuss also questions how to measure the success of policies that complement other policies. For example, success in exiting poverty may demand more social-assistance services. Thus, human needs are not often addressed by a single intervention with the aims of efficiency and immediacy. Titmuss' thoughts in social policy remain avant-garde.

There are several programmes that the Brazilian Government has used to address poverty specifically in rural areas. The rural pension, established by the 1988 Constitution, is a non-contributory pension to rural workers. As for the working-age rural poor, the government has supported small farming through the Food Acquisition Programme (PAA- *Programa de Aquisição de Alimentos*) since 2003. PAA purchases food from small farmers and cooperatives to use it in food banks, community kitchens or popular restaurants. Another initiative is the National Programme to Strengthen Small Farming (PRONAF - *Programa Nacional de Fortalecimento da Agricultultura Familiar)*, which aims to increase access to credit to small farmers.

In this thesis, I use the case study of the *Bolsa Família* (BF) programme. The focus of this thesis is on rural working households, excluding, therefore, the recipients of social pensions or disability pensions (*Benefício de Prestação Continuada)*. The BF

is the main social assistance programme that addresses the able-bodied working-age poor households. Although the BF is not a benefit specific for rural areas, it has a national coverage, encompassing a broader benefit base than the above-cited anti-poverty programmes. In addition, the rural poor may not be necessarily linked to small farming activities, such as the focus given by the PAA and PRONAF.

Other important reasons to justify the focus on the BF programme are the international recognition of this programme as an exemplary programme to combat poverty and the international use of conditional cash transfer as a global anti-poverty social protection instrument. In 2013, the BF won the International Social Security Association Award for Outstanding Achievement in Social Security - a prestigious recognition for the Brazilian Government. As sub-section 2.3.1 investigates, international development banks are increasingly using conditional cash transfers in developing countries, where the successful experience of the BF programme can be adapted and replicated.

The *Bolsa Família* (BF) is a social-assistance non-contributory programme that provides income to households conditional on educational and health behaviour requirements (i.e. "conditionalities"). It is targeted to poor households, and therefore, subjected to means testing. It started in 2003 as an amalgamation of previous social programmes and it rapidly evolved to become the largest conditional, cash-transfer programme in the world, reaching more than 13 million households. It operates in all three administrative levels – e.g. local, state and federal. It also brings together different sectors (health, education and social assistance) into this umbrella intervention.

In 2004, the number of potential beneficiaries was established using the Census and the PNAD. From 2004 to 2010, these numbers were updated using subsequent PNADs. As described, PNADs are not representative of the small rural municipalities investigated in this thesis. Discrepancies between the number of potential beneficiaries obtained from the PNADs, and the number of potential beneficiaries locally registered at the national database, called *Cadastro*[4], became a topic in publications (de la Brière & Lindert 2005; Rocha 2013 pp.101-127; Soares *et*

[4] *Cadastro Único para Programas Sociais do Governo Federal* (Single Registry for Social Programmes of the Federal Government).

al. 2010b). It is important to investigate whether these discrepancies have implications for small municipalities.

Another important theme, despite receiving little attention, is the issue of national quotas. Although some researchers and public officials talk about the universal coverage of the BF (Lindert *et al.* 2007 p.72; TCU 2009b p.145), there are caps at national, state and local levels which limit the number of households who can receive benefits. This situation has created a category of eligible families who are not beneficiaries (Rocha 2013 pp.101-127; Soares 2012a p.6). Given the premise that persistent poverty is predominantly associated with rural remote small municipalities, the findings above led me to ask: Is the PNAD a suitable frame for allocating limited benefits to small poor rural municipalities? Is there a possibility that the persistently poor in rural remote areas, who may need this benefit the most, are excluded? These questions were the primary motivation behind this research.

As noted, this study analyses the BF through different lenses than those generally researched: I use neither the methods based on the PNAD to derive local poverty headcounts and benefits allocation, nor measurements of programme success based on targeting analyses. I use poverty maps, based on small area estimation techniques, although these techniques also have their limitations, further explained in Chapter 3. I also focus on the analysis of trends in programme participation rates. I look at whether the BF reaches the persistently poor in remote municipalities; how the BF expanded in remote and non-remote municipalities from 2004 to 2009; and, how policy-design took into consideration the heterogeneity of poverty and rural areas.

The considerations above refer to the effectiveness of the BF in reaching out to the persistently poor in rural areas. However, the concept of effectiveness I use is more specific than simply the analysis of a policy achieving its objectives. I use the concept of "maximizing effectiveness". As Titmuss (1968 p.67) states "In terms of maximizing effectiveness, the real challenge lies in the problem of 'how to reach the difficult to reach in our societies'" or, in the case studied, how to reach those living in persistent poverty in rural remote areas. For Titmuss (1989), the concept of maximising effectiveness also includes the effective delivery of public services to those difficult to reach and how the policy design meets the beneficiaries' needs. This is the concept of effectiveness that I use throughout this thesis.

The secondary motivation for this thesis is the investigation of how remoteness constrains local implementation of the BF, how it affects households' participation, and how the BF meets the needs of the rural poor in remote and non-remote rural municipalities. I investigate whether those facing persistent poverty are given priority. The narratives of the rural poor are important for a cash-transfer programme that attaches behavioural conditions to areas with lower service provision. This study sheds lights on programme and household dynamics and their relation to geographical location.

This thesis contributes to the literature in two ways: to BF analyses; and to the literature on conditional cash transfers (CCTs) for persistent rural poverty. Underlying these two contributions is consideration of the role of the state in actively promoting social justice.

First of all, this thesis is a policy analysis of the application of the BF programme to a sub-group of the population not analysed before. This thesis innovates by investigating the role of remoteness in BF participation rates, local implementation and household participation. Using poverty maps and geographical information systems I create a typology to identify remoteness. This typology drives the selection of the qualitative case studies as well as the analysis of the BF programme at the national, local and household levels.

Second, it brings to the debate the role of the state in addressing the complex needs of the persistently poor through CCTs. By bringing together top-down policy analyses (at federal and local levels) with bottom-up household life accounts, the study moves the social assistance, cash transfer and conditionality debates beyond household compliance and administrative targeting levels. This research highlights the challenges of poor rural local administrations in implementing the programme. It also shows the immediate impact of the BF on households' lives, as well as its limitations for addressing the long-term needs of the persistently poor.

This research is timely, as Brazil is developing and consolidating its social protection systems. The analysis of social-assistance policies for the persistently poor provides interesting insights. There is an urgent need to encourage Brazilian society and politicians to adopt new approaches to social policy: neither charitable and sporadic

during periods of drought, nor focused on meeting short-term outputs. This thesis illustrates some of the structural and deep-rooted problems of persistent poverty that demand social solidarity and a long-term policy focus.

Furthermore, the use of targeted and conditional social assistance policies is increasingly popular in both developing and developed countries. Programmes like the BF are attractive to governments because of their affordability, the impact it is suggested they have on poverty reduction, and their measurable outputs in terms of conditional attendance at social services. Low-income countries are increasingly using cash transfers. Developed countries are increasingly using conditionalities. Several countries also have problems with service provision in poor remote rural areas. The analysis of the BF in poor remote rural municipalities may provide some useful insights.

Based on the premise that the persistently poor are those predominantly living in rural remote municipalities, I formulate the following hypothesis that *the location of the rural poor's municipality is likely to influence the effective implementation of the Bolsa Família programme*. Effectiveness is understood in terms of "maximizing effectiveness" or how the policy reaches out to the 'hard to reach' and how it meets their needs. This hypothesis translates into the following research question (RQ1):

RQ1: ***"How effectively does the Bolsa Família reach the rural poor in remote and non-remote poor rural municipalities?"***

RQ2: ***If it is not effective, why not?***

a) ***Reasons related to the policy design at the national level***
b) ***Reasons related to the local implementation at the municipal level***
c) ***Reasons related to the households' participation at the community level***

The rest of the thesis is organised in the following way. Chapter 2 reviews the key literature on this topic and details the research questions. Chapter 3 introduces the methods that guided the investigation. Chapter 4 presents descriptive statistics aiming to answer RQ1. Chapter 5 shows the results pertaining to the design of the policy at national level (RQ2a). Chapter 6 analyses the implementation of the programme at the local level (RQ2b). Chapter 7 reports on the in-depth study of the locations and how remoteness affects household opportunities to diversify livelihood

strategies, including participation in the BF programme. Chapter 8 investigates evidence of programme participation from the household perspective (RQ2c). Chapter 9 concludes this thesis by presenting implications for policy and future research.

2. CONDITIONAL CASH TRANSFERS FOR ADDRESSING RURAL POVERTY IN BRAZIL

> *Each person possesses an inviolability founded on justice that even the welfare of society as a whole cannot override. (Rawls 1971 p.3)*

This chapter aims to place this thesis in a dialogue with the relevant wider literature. It is not my objective to provide a comprehensive review on poverty, the role of the state or the *Bolsa Família* (BF) programme, but instead to locate the potential contribution of this thesis to the fields of social policy and rural development in Brazil.

This thesis is part of two specific contemporary debates: a national debate aimed to consolidate the social protection system in Brazil, and a broader international debate on the use of social assistance programmes. This thesis aims to contribute modestly to both debates. The national debate is about the future of the BF: whether or not the BF should be integrated into a universal social protection system (Soares 2012a). Internationally, the use of transfers, with or without conditions, whether cash or in-kind, is in the forefront of anti-poverty social policies in development.

Chapter 1 introduces some of the main motivations to research the BF in rural poor municipalities. It concludes by outlining the structure of the thesis and stating the research questions below:

RQ1: ***"How effectively does the Bolsa Família reach the rural poor in remote and non-remote poor rural municipalities?"***

RQ2: ***If it is not effective, why not?***

a) Reasons related to the policy design at the national level
b) Reasons related to the local implementation at the municipal level
c) Reasons related to the households' participation at the community level

In this Chapter, I analyse in more detail predominant debates on the literature, I identify gaps and areas for research investigation, which justify the enquiry into the research questions above. First, I critically engage with debates on poverty and state practices of social assistance to the poor both nationally and internationally (Sections 2.1 and 2.2). Then, I contextualise the emergence of the BF as a historical process

both in Brazil and internationally. I also consider how this background influences the BF design (Section 2.3). I critically assess the current BF evaluations and the use of conditional cash transfers as a social assistance strategy to fight poverty (Sections 2.3.4 and 2.4). Finally, I conclude with a critical analysis of how the body of literature presented gives rise to the formulation of the proposed research questions (Section 2.5).

2.1 Poverty debates in social policy and development: international and Brazilian perspectives

In this section, I outline key debates on poverty focusing on the social policy and international development literature. The first part addresses the literature internationally; the second part addresses the Brazilian context. In both sub-sections, I conclude with the relevant texts related to the issues of chronic or persistent poverty and rural remote areas, the focus of this thesis.

2.1.1 International debates and practices: poverty, chronic and persistent poverty and spatial dimensions

Debates on poverty

Seebohm Rowntree (1902), in his seminal work *Poverty: a study of town life*, defines "primary poverty" as subsistence – "an estimate of minimum necessary expenditure for the maintenance of merely physical health" (p.87). The author uses the lower estimate of the minimum necessary to meet a list of necessities such as food, clothing, fuel, and household sundries. His work was inspired by Charles Booth's *Life and Labour of the People in London*, first published in 1889. This study produced the first poverty map of London.

The concept of an estimated income threshold as a measurement of poverty (or absolute poverty line) is very influential. It helped to establish the means tests still used nowadays for eligibility for welfare benefits. It is also the concept behind the international yardstick, the World Bank's "dollar a day" poverty line, based on purchasing power parity and calculated in a dollar value [5](Hall & Midgley 2004 p.47)

[5] Currently measured as US$1.25 a day in 2005 prices.

Peter Townsend (1962) was a critical opponent of this static and absolute concept of poverty. Townsend argued that minimum requirements for subsistence are arbitrary, and they are set so low that they give a picture of poverty distorted by over-conservative estimates. The absolute poverty definition is a measure of income inequality instead (Townsend 2006). Poor people suffer from inequality of distribution and from unfulfilled social needs relative to the standards in a given society ("relative deprivation") (Townsend 1962).

Townsend's work was very influential for the theoretical advancement of the concept of relative poverty. Poverty is no longer understood as a static binary concept but rather a continuum of measurement that requires relational judgement and comparisons in time and space. Absolute poverty is equated to acute, severe and multiple levels of deprivation or, in other words, the bottom end of the continuum.

In 1990, the United Nations Development Programme (UNDP) released its first "Human Development Index" with the launch of the *Human Development Report*. This first report, whose principal author was Mahbub ul Haq[6], introduced the concept of human development "as a process of enlarging people's choices" (UNDP 1990 p.10). The Human Development Index provided an alternative to the "dollar-a-day" line, adding to the international poverty debate dimensions beyond income measure, such as "to lead a long and healthy life", to be educated and to enjoy a "decent standard of living" (p.10).

Debates on poverty and human development were brought to the forefront of the international development agenda in the 1990s. In 1995, the United Nations convened a World Summit for Social Development in Copenhagen. Governments pledged their commitment to social and human development, including objectives of eradicating absolute poverty, supporting full employment, equality and equity and the protection of human rights (UN 1995).

In 2000, the United Nations Millennium Declaration agreed on targets known as the Millennium Development Goals (MDGs). The first MDG is to halve by 2015 extreme poverty rates (measured by the dollar-a-day poverty line) and hunger, measured by 1990 levels. The goal of having the extreme poverty rates was globally

[6] Influenced by Amartya Sen's work on capabilities.

met by 2010 (UN 2014). Discussions on the post-2015 Development Agenda are currently being conducted, and the focus on extreme poverty reduction is likely to continue on the national and international agendas[7].

Poverty lines are generally measured by cross-sectional surveys. They do not capture an important and recognised characteristic of poverty – the dynamics associated with the life cycle. Longitudinal surveys, which differentiate between those who live in chronic poverty and those who live in transient poverty, are used to capture these poverty dynamics[8].

Studies of chronic and persistent poverty gained international prominence through the work of the Chronic Poverty Research Centre (CPRC), which began a ten-year programme in 2001, involving a partnership of universities, research centres and non-governmental organisations, located in Manchester, United Kingdom. CPRC was established in 2000-1 as an international partnership of universities, research institutes and non-governmental organisations to address the "other half" of the first goal of the MDG (Hulme 2003; Shepherd 2011). As Hulme and Shepherd (2003) put it:

> While earlier ages sought to help the 'deserving poor' the contemporary focus is on the 'easy to assist poor' (a focus that is encouraged by the MDGs). This group desperately needs support, but not at the price of ignoring those whose poverty is more problematic. (Hulme & Shepherd 2003 p.404)

Chronic and persistent poverty

The chronic poor are defined by the fact that their poverty is of long-term duration and may even persist through generations (CPRC 2005; Hulme & Shepherd 2003). As explained in Chapter 1, chronic poverty is an umbrella term and it differs from the static definitions of extreme and severe poor. The chronic or persistently poor are the "usually poor" or the "always poor" (Hulme & Shepherd 2003 p.405) who suffer deprivation in several dimensions that result in their being hard to reach: low income; few or no assets; low human capital; and social/political exclusion over long periods.

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[7] On December 4th, 2014, the UN released *The Synthesis Report of the Secretary-General on the Post-2015 Agenda.* At the top of the Sustainable Development Goals table are to end poverty and hunger, to achieve food security and to promote sustainable agriculture.

[8] Cross-sectional surveys can be used to identify the chronic poor through proxies such as low health status and low education levels, which can give an idea of past living conditions. See McKay and Lawson (2003).

Poverty experts have agreed on the need to investigate persistent poverty to inform policy prescriptions (CPRC 2005). The chronic or the persistently poor need different policies from those prescribed to lift the average number of the aggregate poor out of poverty (Bird *et al.* 2002). For a country or a region with transient poor (i.e. poor for only short periods of time), micro-credit and training may enable them to return to the market; to combat persistent poverty, policies focused on redistribution, identification of structural bottlenecks and access to basic services may be more effective (CPRC 2005; Hulme & Shepherd 2003).

During the time that these studies in persistent or chronic poverty were being carried out, there was a shift in development discourse. Social protection, seen as an instrument to address vulnerability, became mainstreamed by international institutions and development aid: it became a third pillar addressing poverty reduction, along with economic growth and human development (Shepherd 2011).

This shift was a result of a combination of factors: an emerging consensus by multilateral institutions on the need to establish social protection for developing countries; an ideological match between the "narrow" understanding of social protection and the World Bank's targeted and residual social policy addressing risks in the event of a shortfall of living standards; and the electoral advantages for governments of the low cost of social protection programmes (Barrientos *et al.* 2005; Hall in press). This change in discourse is further analysed in section 2.3.

Persistent poverty and spatial dimensions of poverty

"[C]hronic poverty remains mainly a rural phenomenon" (CPRC 2008a p.6). However, this association between persistent poverty and rural areas is not causal. Although extremely likely, not every household that lives in a rural area is necessarily among the persistently poor; there are also the transient poor and the non-poor. Other areas can be also associated with higher chronic poverty, such as politically marginalised areas and areas affected by conflict (CPRC 2005,2008b; Hulme 2003; Hulme & Shepherd 2003).

Persistent poverty can also be concentrated in "spatial poverty traps", where poverty is persistently high and there are multiple levels of deprivation across many years (CPRC 2005 p.26). These are geographical areas with low levels of capital, i.e.

economic, physical, natural, human, social, environmental and political, that make exiting from poverty a difficult task (Bird *et al.* 2010a; Reardon & Vosti 1995; Scherr 2000).

Jazairy *et al.* (1992) seminal publication *The State of the world rural poverty: an inquiry into its cause and consequences* acknowledged the association between poverty and spatial dimensions. This IFAD report classified the poverty found in this association into two types: peripheral poverty, i.e. that found in remote areas with poor communications; and endemic poverty, i.e. that present in areas with a poor resource base reflecting low income and poor nutrition/health.

In the 2001 Rural Poverty Report, IFAD reinforced that "generally the poorest of the poor live in remote rural areas" (2001 p.21). Today, several studies on the spatial dimensions of poverty attempt to disentangle social from geographical disadvantages (Bird *et al.* 2010a; CPRC 2005,2008b; Jalan & Ravallion 1997; Ravallion & Wodon 1997; Sen 2003; Shepherd 2011). Reasons given for the link between persistent poverty and remote rural areas (RRA) include: location specificities (spatial poverty trap); difficulties preventing residual population from migrating out of the area; higher risks, vulnerability and social exclusion due to imperfect markets; and reduced public social service provision (Bird *et al.* 2002).

Several studies empirically analyse the link between RRA and chronic or persistent poverty. Bird and Shepherd (2003) found an association between remoteness and lower public and private investment in four districts in the semi-arid region of rural Zimbabwe. This is an important finding for programmes like the BF, which ties beneficiaries to conditional behaviours such as school and health care attendance. It is, therefore, important to investigate whether remoteness of rural remote areas reduces public investments affecting the access, existence and quality of services in the particular case of Brazil.

Bird *et al.* (2010b) constructed an index of isolation based on remoteness, using 1999-2000 Uganda household surveys. The index showed a strong correlation between remoteness and chronic poverty. Remoteness is also associated with lower livelihood diversification, lower remittances, higher reliance on agriculture and less access to services.

In terms of determinants of chronic poverty, Okwi *et al.* (2007) conducted a spatial regression analysis to understand chronic poverty in small rural geographical locations in Kenya. The authors found that agro-climatic factors influenced the geographical distribution of poverty. They identified a significant positive effect between average travel time and poverty incidence. Recurrent themes in determining poverty in different provinces were: distance to centres; road quality; and soil conditions. Building on these findings, I was able to include distance to centres and road quality in the construction of the variable "remoteness" I used in this thesis. This is further explained in Chapter 3.

Adding to Okwi *et al.* study, Ravallion and Wodon (1997), using two cross-sectional surveys in Bangladesh, found that poor areas were poor not only because of a concentration of poor households with particular characteristics, but also because of the location where the household lived. Geographical differences in living standards cannot be attributed only to household characteristics.

The studies above conducted in different countries using different methods and datasets conclude that there is an association between the type of poverty in rural areas and the geographical location where the poor live. Most importantly, the association between persistent poverty and rural remote areas cannot be attributed solely to household characteristics but location influences the existence of long-term structural poverty, the access to public services and the reduced opportunities to exit poverty.

Nevertheless, there have been a number of criticisms of the use of spatial poverty analysis in developing countries. Burke and Jayne (2010), in a longitudinal study in Kenya, demonstrated that spatial factors and household characteristics explained variations in wealth, but that spatial factors did not "trap" households in poverty. Nord *et al.*(1995), using USA microdata, found that the causes of poverty differed from their spatial concentration. Migration patterns restore the equilibrium condition and addressing area-poverty would only redistribute poverty spatially. However, the former study has evidence to support the claim of spatial poverty, whereas the migration equilibrium hypothesis of the latter study is difficult to hold, as there are social, economic and physical barriers to migration (cf.Ravallion & Wodon 1997).

There is, nonetheless, a long-held tradition that policy prescriptions based on geographical location are misguided. On one hand, sociologists like Peter Townsend – whose work is based on location – do not prescribe policies based on geographical location because they understand that geographical inequalities are a structural feature of capitalism (Glennerster *et al.* 1999). On the other hand, free-market economists argue that poorer areas will eventually be integrated to the economy – they are best left to themselves (Nord *et al.* 1995).

The international development response of institutions like the World Bank subscribes to the latter view. Although the 2000-1 World Development Report (WDR) recognised that "isolation and lack of education can create poverty traps that persist over generations" (World Bank 2001b p.124), the 2009 WDR held that spatial disparities were inevitable, and advocated against geographical targeting and in favour of the concentration of production and economic integration. As income rises, the World Bank argued, living standards and services within different geographical regions will slowly converge (2009c). However, the 2005 WDR supported government intervention in basic aspects of the market such as infrastructure, property rights, taxation and some regulation (World Bank 2004b). The problem with this minimal intervention argument is that, in my view, it gives rise to the question "What level of intervention is acceptable"? If intervention is permissible, even of the most minimal kind, the case for no geographical intervention becomes weak.

Although Townsend did not prescribe area-based policies, he did not dismiss them out of hand. Glennerster *et al.* (1999 p.7) emphasised the word "cardinal" in Townsend's comments: "an area strategy cannot be the *cardinal* means of dealing with poverty". There is, therefore, the possibility that area-based initiatives could minimise the concentration of those factors that cause and reinforce household and intra-regional inequalities and result in long-term poverty.

The type and location of poverty are also concerns of rural development specialists. Proponents of the sustainable livelihoods approach suggest that exiting rural poverty can be done sustainably through access to various livelihood resources (natural, economic, human and social capitals and assets), using diversified livelihood strategies (agricultural intensification, migration, diversification), and by emphasising

civil society and stakeholder participation in policy outcomes (Bebbington 1999; Chambers & Conway 1991; Scoones 1998; Sen 2003; Thomson 2000).

As well as the sustainable livelihoods approach, linkages between rural and urban areas can be explored as factors that either help or hinder rural poverty-reduction initiatives. The interconnectedness of rural and urban locations, and the resulting flow of peoples, resources and services, create rural-urban processes that cannot be overlooked (Tacoli 1998,2007). This may be especially important in rural remote areas (Bird *et al.* 2002).

In the 1980s, Integrated Rural Development approaches, which addressed regional development for RRA, came to a halt. After the 1990s the international rural development approach consisted of livelihood resources and strategies (Ellis & Biggs 2001). However, the potential of linkages and sustainable livelihoods approach were not fully explored. As Bird *et al.* (2002 pp. 3, 48) argue, the focus on livelihoods development did not take into consideration the severe marginalisation of RRAs, and the result was a "widespread 'policy failure' in RRAs."

The rural poverty literature resonates with the chronic poverty literature on the issue of whether or not the international community is overlooking the other half of the poor, that is, the persistently poor living in rural areas. Despite declining rural populations, 70% of the extreme poor are rural and a large proportion of them are children and women. This situation in rural areas is very likely to remain even with urbanisation (IFAD 2010 p.16). Forty per cent of the rural poor in developing countries live in remote areas or in areas with low economic potential (CPRC 2005 p.28). IFAD Rural Poverty Reports (IFAD 2001,2010) have continuously shown the low levels of international support in agriculture and rural economies – international aid resources are not directed to where the majority of the extreme poor live and work.

In this sub-section, I have demonstrated the importance of researching rural poverty and remoteness given its association with the type of poverty that is chronic, severe and persistent throughout generations. By shifting attention to national policies and monitoring aggregate numbers, both international and national policies are failing to address chronic poverty and RRA (Bird *et al.* 2002). Area-based analysis and

regional development initiatives are being given less emphasis, despite the growing evidence that geographical factors do influence, to a certain degree, households' abilities to exit poverty. In sum, *the type of poverty and the type of place where the poor live matter.*

2.1.2 Brazilian debates and policies: poverty, persistent poverty and spatial dimensions

Poverty measurements in Brazil

Studies on poverty in Brazil are primarily guided by availability of existing data. As a consequence, as Osorio *et al.* (2011b p.18) state, "one should avoid dogmatic considerations about the numbers of poor and of extreme poor" in Brazil.

From the 1970s to 1990s, researchers used the minimum wage as a poverty line proxy (Rocha 1996,1997). However, the use of income indicators, such as the minimum wage, has several shortcomings, as Rocha (1996,2001) indicates: (i) per capita income does not show the effects of household economies of scale; (ii) minimum wages are lower than the cost of necessities; (iii) irregular indexation and the short Brazilian economic cycles have devalued the real value of the minimum wage; (iv) it does not take into consideration local variations in prices; and (v) it underestimates the urban poverty headcount and overestimates rural poverty.

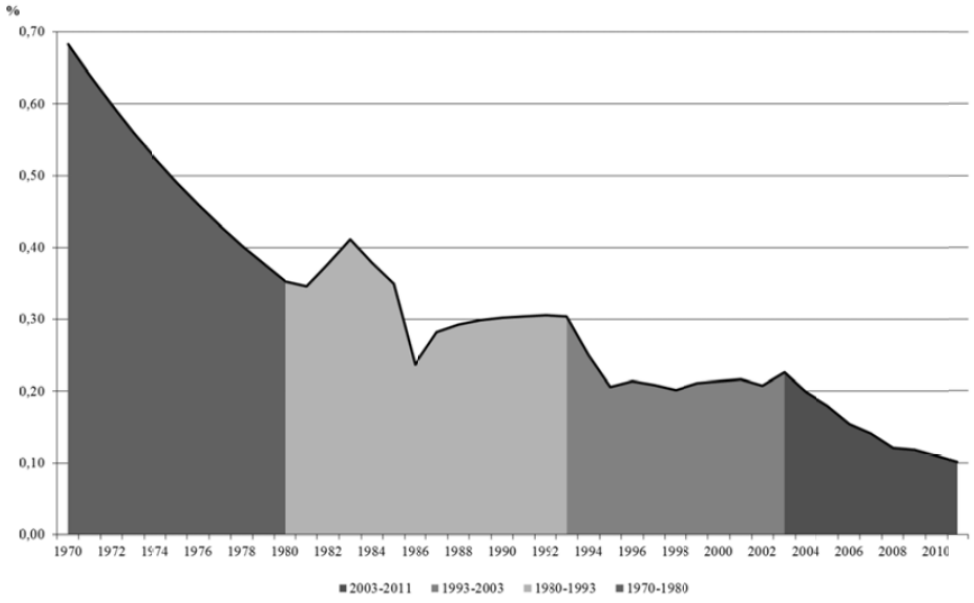
Other studies using different methods to calculate poverty have been conducted in Brazil, but the income threshold to measure poverty, based on the yearly National Household Surveys (PNAD – *Pesquisa Nacional por Amostra de Domicílios*), is still commonly used. Although PNAD allows for a broader index of poverty than income, including household conditions, official population statistics are generally reported utilising the minimum wage. Other proxies for poverty analyses are the eligibility thresholds for social assistance programmes like the BF and the *Benefício de Prestação Continuada* (BPC) – a social pension for the elderly and people with disabilities[9] [10]. Therefore, because calculations of poverty in Brazil vary, different studies may not be comparable.

[9] The BF poverty line is frequently updated. The eligibility for the BPC is one-quarter of the minimum wage per capita monthly family income.

Poverty trends and policies

Rocha's study (2012 p.2) analysing long-term poverty rates from the 1970s to 2011 shows that absolute poverty declined from 68.3% in 1970 to 20.1% in 2011 (Figure 1)[11]. Although the findings in the literature on poverty rates in the 1980s are mixed, there is a consensus that poverty rates declined from 1993 to 1995 due to macroeconomic stabilisation, and also from 2003 to 2010, the period analysed in this thesis.

Figure 1: Poverty trends in Brazil, 1970-2011



Source: Reprinted from Rocha (2012 p.3).

Poverty in Brazil fell significantly from 2003 to 2010. In 2003, Brazil had 12% of the population living on less than U$1.25 dollars/day; in 2008, this was down to 4.8% (IPEA & SIP/MP 2010 p.22)[12]. This is a remarkable achievement. Whatever the absolute numbers in any particular study, which are dependent upon the methodology used by researchers, poverty shows an overall reduction (IPEA 2011; Rocha 2012). The literature suggests that the important factors contributing to this reduction are

[10] The Chronic Poverty Report 2004-5 identifies two groups that generally experience chronic poverty – people with disabilities, and those who are able-bodied but who cannot escape from poverty due to lack of assets, unemployment (or under-employment) and/or discrimination. The latter group is the focus of this thesis.
[11] Rocha's studies are based on regionalised consumption poverty lines.
[12] Poverty calculated as a percentage of the population living with less than US$1.25 per day. These calculations exclude the rural population of the North of Brazil.

more rapid economic growth, greater employment and the impact of social protection policies.

Economic growth, with an average of 4.2% per year during this period from 2003 to 2010, contributed to an increase in formal employment. During this period, there was an average of 1.6 million jobs created per year (Rocha 2012 p.15).

The labour market is linked to demographic patterns that may also have contributed to the reduction of poverty and inequality, both before and during this period. Population aging, and changes in fertility and the resulting lower ratio of young dependents to working-age adults in a household, may have helped to reduce inequality within household groups in the same income bracket (Medeiros *et al.* 2006; Neri 2011; Schwartzman 2006). However, recent studies show that even though there was an increase in average years of schooling for the working age population, and a reduction in illiteracy levels, these changes had little influence on inequality (Osorio *et al.* 2011b).

The Brazilian Institute for Applied Economic Research (IPEA) (2011 p.5) has shown that there was a substantial change in the composition of income due to the policy of real value increases in the minimum wage. Studies based on PNAD demonstrate the importance of real gains in the minimum wage for those in formal employment and for those receiving social assistance benefits (IPEA 2011; Osorio *et al.* 2011b; Rocha 2012; Schwartzman 2006). In 2009, it is highly unlikely that those households with one minimum wage would be in the extreme poor category, unless it had a large number of dependents (Osorio *et al.* 2011b).

In addition to the role of the labour market (i.e. formal employment) in reducing poverty through the minimum wage (Rocha 2012; Schwartzman 2006), there is the importance of social assistance policies, mostly those tied to minimum wages (IPEA 2011; Osorio *et al.* 2011b). Medeiros *et al.* (2006) attribute 50% of the reduction in inequality between 2001 to 2004 to income derived from work, and 35% to non-work income. Among the latter, 30% were public transfers: 16% received income from the BPC and social pensions, and 14% from the BF (p.52).

Furthermore, by 2010 Brazil had seen an unprecedented reduction in inequality. Using PNADs, Neri (2011 p.43) calculated that the real incomes of the poorest 10%

grew by 69% from 2003 to 2009, whereas the top 10% saw their real incomes grow by just 12.8%. From 1995-2004, the BPC and BF contributed 28% of the reduction of inequality (Soares *et al.* 2006 p.4). Nonetheless, income inequality remains very high. The fast rate of inequality reduction would need to continue for the next 20 years, for the poorest two deciles of the population of Brazil to have an average income comparable to those living in countries with similar GDP per capita (p.20). Yet how are these advances in poverty reduction reflected in the regions? How is rural poverty and persistent poverty being reduced? This is what I turn to next.

Regional poverty, rural poverty and persistent poverty

The first and foremost issue we need to keep in mind is the following:

> Obviously, part of the extreme poor living in a situation of chronic poverty remained in it from 2004 to 2009. However, the best estimates of the population in chronic poverty in Brazil are still very rough estimates due to the lack of panel data with national coverage and to the incomplete income information. These shortcomings challenge the identification and the study of successful strategies to overcome poverty. (Osorio *et al.* 2011b p.19)

The above extract highlights the challenges of studying chronic poverty in Brazil, due to lack of longitudinal datasets, as well as the importance of studying persistent poverty as this thesis proposes. It also shows that no study has identified poverty dynamics in Brazil for rural or for remote areas. The datasets are cross-sectional and unrepresentative of the population I address in this thesis; and the definition of rural areas used in my research differs from those used by Brazilian researchers[13]. Therefore, my research does not directly address the findings presented below; and these findings themselves may not necessarily be relevant for the analysis of persistent poverty in rural remote areas.

There are two important debates on poverty in Brazil. The first one is the importance of rural poverty, while the second relates to the geographical location of poverty. Although these themes overlap, it is important to keep in mind that neither all rural areas nor all remote areas have high poverty rates.

Rocha (2012 p.9) claims that rural poverty is less important now that there are high rates of urbanisation and agricultural modernisation (1980 – 1993) and that, therefore,

[13] More details in the next chapter.

the debate should be about the urbanisation or peri-urbanisation of poverty. The author also believes that problems of urban poverty are more complex than the problems of rural poverty, because metropolitan areas are where "violence, exclusion and lack of social cohesion are combined" (Rocha 2012 p.22).

I disagree with Rocha on (i) the claim that rural poverty problems are less complex than urban problems, and (ii) the treatment of rural and urban poverty as binary variables, without considering their linkages. This thesis shows the complexity of rural poverty and the need to link rural-urban analysis.

In general, researchers tend to focus either on binary exclusive categories of rural and urban, or solely on urban themes. This is partly a consequence of methodological issues in Brazilian surveys[14], but it is also a result of what Veiga (2001) calls two serious mistakes in the Brazilian rural debate. The first is the myth of Brazil's speedy urbanisation. Urban areas are defined by municipal law, which does not take into account population density. The second is the idea that rural Brazil does not include services or industry, but only agriculture and livestock. This results in data analysis divided by occupation that does not consider the multiple livelihood strategies for income diversification[15] in the dynamic reality of rural space.

Furthermore, there is conflicting evidence on rural poverty. IFAD (2011 p.2) reported that Brazil has the "largest rural poor population in the western hemisphere", and that northeast Brazil has the "single largest concentration of rural poverty in Latin America". According to IFAD, only 5% of the urban poor are facing extreme poverty, as opposed to the 25% of rural poor (p.3). A World Bank study affirms that "contrary to popular opinion, poverty in Brazil is currently not an overwhelmingly urban phenomenon" (2003 p.8).

However, some researchers have argued that there is a "rural bias" in the BF programme, which fails to take account of the fact that rural areas face a lower cost of living, and to adjust the eligibility/cut-off criteria for geographical price differences.

[14] PNADs only sampled the rural North in 2004. Other surveys, like the PME, are sampled only in metropolitan areas. The introduction of the *PNAD Contínua* (2014) improves the precision of estimates in rural areas.
[15] In the Brazilian literature, this concept is referred as *pluriatividade.*

Analysing the 2009 PNAD, Higgins[16] (2012 pp.103, 104,107) states that the decrease in poverty has been "substantially higher in Brazil's most rural states", and that the rural poor have a 31% chance of escaping poverty (while the urban poor only have a 26% chance). Thus, it may be the case that the "rural bias" of social transfers has significantly reduced poverty in rural areas.

Analysis of the latest 2010 Census (MDS 2011 p.3) reveals a continuing trend of high poverty in rural areas[17]. Although 46.7% of the extreme poor are rural as opposed to 53.3% in urban areas, the former represent more than 25.5% of the rural population while the latter represent just 5.4% of the urban population. On the basis of the 2009 PNAD, researchers have concluded that small farming households are more represented in the extreme poverty category: they are 21% of the poor, but 36% of the extreme poor (IPEA 2011 p.13)[18]. Osorio *et al.*(2011b p. 48) states that in 2009 97% of the extreme poor were working-age poor – either related to agriculture, or in precarious jobs or unemployed[18].

There are conflicting views about regional trends of poverty. Although Rocha acknowledges that the North and Northeast concentrates large numbers of extreme poverty and deprivation, the author (2012 p.15) found that poverty was converging geographically in 2003: 22% rural areas, 20% urban non-metropolitan areas, and 27% metropolitan areas. Neri (2011 p.15) demonstrated increases in income during the 2003-2009 period, of 49% in rural areas, 26% in non-metropolitan areas and 16% in metropolitan areas.

Osório *et al.* (2011b p.16) and the World Bank (2003), however, advise caution on the use of PNAD (as used by Rocha and Neri) for regional analysis or even macro-regional analysis. Even using PNAD, Osorio *et al.* found that little had changed in the spatial distribution of poverty during the 2003-2009 period. They proposed that policy focus on small municipalities of the Northeast. Small rural municipalities of

[16] Poverty is calculated based on the regionalised costs of food items to fulfil the minimum daily caloric intake plus non-food items (housing rental rates as proxy).
[17] The extreme poverty line was defined as R$70 per household monthly *per capita* in 2010 (or US$40.60 as of 04/01/2010). For all calculations on exchange rates used in this thesis refer to BACEN (2014).
[18] The extreme poverty line was defined as R$67 per household monthly *per capita* in 2009 (or US$28.76 as of 02/01/2009).

the Northeast, like the ones I investigate, have a higher proportion of the extremely poor, and this is where extreme poverty in Brazil is located (p.39).

Updated statistics on dimensions of poverty other than income, for example, reveal that, whereas 41% of the rural population (15 years old and older) were functionally illiterate in 2009, and 17% in urban areas; in the rural Northeast, 50% of the population were functionally illiterate (IBGE 2010b p.55). Rural poverty is higher in the Northeast, concentrated among small farmers and located in remote areas (World Bank 2003). Of those poor living in rural areas of the Northeast, 83.6% live in "remote, isolated, sparsely populated and low productivity areas" with little or no infrastructure (p.9). Ferreira and Lanjouw (2001) show that the location of rural areas in relation to urban areas is an important factor determining earnings from rural nonfarm activity.

In summary, this sub-section showed that despite the lack of consensus among Brazilian researchers about the importance of focusing on the study of rural poverty and despite the methodological difficulties of studying chronic and persistent poverty, the literature does suggest that persistent poverty in rural areas is concentrated in the Northeast, in small rural remote municipalities, and that location and linkages to urban municipalities are important sources for livelihood diversification. Consistently lower socio-economic indicators show that patterns of poverty are likely to have continued even during the recent period of economic growth, because of structural inequalities. This Brazilian evidence, together with the overarching international literature on chronic poverty and the spatial dimensions of poverty, provides a strong enough basis to set as a valid premise the association between persistent poverty and poor rural remote areas.

2.2 State practices: ethics and policies

In this sub-section, I provide the background literature for state intervention in the form of social assistance to the poor, as well as the arguments for targeting or universality in granting benefits, and for making transfers conditional or unconditional.

2.2.1 Market and State: Ethics for assisting the poor and policy implications

Ethics for assisting the poor and policy implications

Although some of the reasons for assisting the poor may reside in the realm of individual ethics – i.e. moral obligations in terms of positive or negative duties[19] – I focus the analysis on the role of state intervention in issues of poverty, redistribution and social justice, following the social contract tradition.

On one side of the debate, there are those that propose a minimal state and no involvement in redistribution[20]. Free-market economists claim that neither the state nor individuals would understand the complexity of the economy, and that therefore, markets are the most efficient mechanism to reach equilibrium (Chang 2014). Hayek, for example, is critical of the Welfare State in its quest to redistribute wealth and achieve equality and social justice. He believed that this could only be achieved through coercion of individual freedoms, and would result in inflationary policies, loss of self-confidence, dependence, and the totalitarian state. For Hayek, state involvement should be kept to a minimum (Hayek 1944; Miller 2010 p.29).

In terms of social policy, the minimal state is captured by Titmuss' "Residual Welfare Model" (1974). In this model, the role of the state is to meet the needs of that part of the population who have been failed by the market and the family, but only temporarily. This residual model, which lies behind targeted poverty policies, has links with the sociological literature on concepts of an underclass and a culture of poverty, which argues that the causes of poverty are behavioural.

The underclass are the able-bodied who are persistently poor. They are prone to break the rules and social norms that guide society – i.e. teenage pregnancies, unmarried childbearing, illiterates, joblessness, criminals and drug users (Sawhill 1989). For Lewis (Lewis 1998; Mead 2003), the poor who share the "culture of poverty" have "feeling[s] of marginality, of helplessness, of dependence, of not

[19] Positive duty refers to the individual duty to improve the welfare of others that are in need; negative duty refers to the obligation not to cause harm to others or to reduce the harmful effects of our actions on others. For a discussion on ethics for social assistance, see Barrientos (2013b).

[20] Theoretically there are two extreme positions in this debate – absolute free-market on the one hand, and the abolition of markets on the other. In practice, however, what happens is an interplay of state and market in between these two extremist positions.

belonging" (Lewis 1998 p.1). They live for the present and indulge their impulses. There is a duality of poor versus non-poor, us versus them, deserving versus undeserving. The deserving poor are associated with the conditionalities debate, discussed in sub-section 2.2.2.

In terms of international development, the Reagan-Thatcher era promoted the idea of minimal state involvement and the rise of neoliberalism, with the primacy of markets, privatisation and liberalisation supported Structural Adjustment Loans. The low growth rates in developing countries during this period, together with the impact of structural adjustment loans on education and poverty indicators, have made some specialists question these policies (Chang & Grabel 2004 p.17; Cornia *et al.* 1987). From the mid-1990s onwards, the state addressed concerns of poverty reduction via targeted social safety nets (discussed in section 2.3).

On the other side of the debate are those who favour the State's participation in the economy. Townsend (2004) attributes to Keynesianism the increase in acceptance of the establishment of the Welfare State in Europe. Pressman (1991), reviewing Keynes' writings on issues around poverty, says that Keynes was sceptical that gains from growth would reach those at low-income levels without intervention. Keynes advocated redistributive fiscal and monetary policies, but he was also aware of the potential adverse impact this could have on incentives to invest and work. Keynes justified redistribution on the basis of the higher marginal propensity to consume of lower-income families, which would increase effective demand, resulting in greater growth.

Titmuss (1974,1987) differentiated social policy objectives from economic objectives. Social services are not aimed to "make profit or to administer prices", but to address areas that the market and family cannot or will not address (1974 p.51). Here, policy outcomes are less susceptible to being measured by numbers or efficiency concepts than the private sector. Titmuss makes the case that the principles that guide markets (consumerism, affluence, efficiency) are inherently different from those that should guide state intervention in the quest for social justice.

For Titmuss (1974), the residual welfare state model would create and reinforce divisions in society and the stigmatisation[21] of certain groups. He suggests as an alternative an "Institutional Redistributive Model"[22]. In this model, social policies are based on needs. They are universal, equally available to those who work and those who don't, to the poor and to those who have money. For that reason, they are less invasive and less subject to judgements, such as the "deserving" poor, than targeted forms of social assistance.

Some influence of Keynesianism could be observed in economic policies after the global financial crisis. The use of domestic spending to curtail the effects of the global financial crisis in the United States by President Obama is one example. In Brazil, the 1988 Citizen Constitution with a rights-based framework (further discussed in section 2.3), is another example of support for State spending in a universal system of welfare.

Common ground: prioritising social policies for the persistently poor

Since this thesis analyses the persistently poor, it is important to outline the prioritisation argument. I investigate the persistently poor with the understanding that targeted programmes, like the *Bolsa Família*, should efficiently reach the worst off. However, it is not my intention to claim that state assistance, therefore, should only be targeted to the persistently poor.

For very different reasons and with opposite policy prescriptions, it is interesting to note that state assistance to the neediest is something pro-market and pro-state adherents have in common. One reason for this is that social assistance to the poorest reinforces the social contract between State and citizens.

Hayek argued that a safety net was necessary to prevent the undesirable outcome of people falling below certain levels, but that this minimum should not come with a sense of entitlement. He understood that this would require some redistribution, but it

[21] Titmuss (1974 p.43) defined stigma as "an imputation attaching to a person's reputation or standing. (…) to describe him or his behaviour in culturally offensive or unacceptable terms, for example as a coward, a layabout, a racist, (..), a failure…".

[22] Titmuss (1974 p.31) cites another model called "The Industrial Achievement-Performance Model of Social Policy". However, this model, along with other classifications by other social policy specialists (e.g. Esping-Andersen's), are not relevant to this thesis.

would be with the aim of protecting the majority of the population "against the consequences of the extreme misery of their fellows" (Miller 2010 p.150).

For Titmuss (1987), selective policies, based on needs, could coexist with universal policies. But targeting only the extreme poor would hide structural systemic factors that perpetuate poverty, such as inequality, social injustice and exclusion. Selected policies, therefore, should not rely on individual means testing but on other less stigmatising factors and promote social cohesion instead of social division.

From recognition that the persistently poor should be assisted, it does not follow that the poorest should be prioritised. Scarce resources could be allocated to the average utility of society – the classic utilitarianism. So what are the bases for the prioritisation of the persistently poor in targeted benefits? Considering limited budgets and mutually exclusive choices, should preference be given to the persistently poor who live in rural remote areas of Brazil, where the incidence of poverty is higher? Or to the urban poor in Brazil, whose numbers are greater?

Reducing the numbers of the poor by the most effective intervention is a desirable end. Sidgwick (2000 p.256) says that utilitarianism aims to produce the "greatest surplus of pleasure over pain", or the net balance of satisfaction. Utilitarian calculations, therefore, treat all satisfactions as comparable, and quantify them using a single preference scale for the whole society. Such comparability (or impartiality) has historically had an element of egalitarianism, as "to count everyone's happiness equally was to prioritize the interests of the majority, who were disadvantaged relative to a wealthy minority" (Jackson 2004 p.522). However, everyone's satisfaction counts as the same: the satisfaction the persistently poor get from eating to survive is the same as the satisfaction of the non-poor in purchasing a house. Such impartiality can be harmful for social policies aimed to address the "lesser number", i.e. the persistently poor.

In addition, being the hardest-to-reach, the persistently poor would also be the most difficult to help, and the amount of resources poured into assisting them might take the calculation of utility towards excluding them. This is part of the criticism against the MDGs raised by poverty specialists (Hulme & Shepherd 2003). Although the authors do not bring the utilitarian rationale into this debate, the underlying logic is

easily observed in where international aid is directed (the "easy to assist poor") (p.404).

Rawls (1971) criticised the utilitarian calculus, as demonstrated by the opening quote of this chapter. Utilitarianism treats society homogeneously in a quest for efficient administration. Rawls proposed instead what he called the "difference principle": differences in primary goods (rights, liberties, power, opportunities, income and wealth) are justifiable if they are for the greater benefit of the least advantaged members of society. Rawls (p. 98) acknowledges some level of arbitrariness in determining the "least fortunate group", but, as much as possible, the definition of the worst-off is appraised from a position of the equal citizenship of all (i.e. "the veil of ignorance"). As such, the difference principle achieves some of the intent of the redress principle.

Parfit (1997) explains the prioritisation of the worst-off based on deontological egalitarianism[23]. According to deontological egalitarianism, inequality may not be bad in itself; it can be justified if it was previously agreed on and based on mutual benefit (contractarian). However, this is not the case with the inequalities in the lives of the worst-off. These are unjust because they violate the basic principles of the social contract. Thus, assistance to the worst-off is justified.

Barrientos (2010,2013b) brings this discussion to the poverty debate. The priority view brings attention to poverty gaps, poverty dynamics and the worst-off – understood as those "whose lives, taken as a whole, are worse than they might have been" (2010 pp. 10-11). Poverty policy is, therefore, influenced by ethical assumptions.

Policy decisions are based on utilitarian considerations more often than is acknowledged. It is our role as social scientists to ask why this is the case. Whilst targeted programmes, like the BF, should reach the worst-off, utilitarian calculations may result in the persistently poor being left out altogether. After making the case for investigating the prioritisation of the persistently poor in the BF, we are left with the following debates: universal or targeted benefits? Conditional or unconditional?

[23] Parfit(1997 p.213) says that utilitarians would give priority to the worst-off as they are "likely to be easier to help". This, however, may not be the case for the chronic poor living in areas without services, roads or other types of infrastructure.

2.2.2 Targeted and conditional?

Universal versus selective benefits

Although this debate is often seen to involve opposite philosophical grounds, social policies in general all require a degree of targeting[24] (Atkinson 1993 pp.2-3). Even universal benefits, like child allowance for example, are categorical to families with children. Moreover, policy regimes are often a mix of both systems, even when the dominant tendency is towards targeted policies (Mkandawire 2005).

Universalist principles are based on human rights (natural or defined by international law) and on human needs. For legalists, all humans are equals, so their rights are universal, i.e. the same for everyone. Human rights are inalienable and exist in all countries, regardless of their positive law. The United Nations Declaration of Human Rights, along with other human rights legislation, legally binds the state to its citizens. For the proponents of needs, humans have common needs that must be met in order to function as a moral agent (Munro 2010). Doyal and Gough (1986), for example, identified the universality of needs related to health and autonomy that must be universally met.

However, there are also human needs behind targeted social policies (Munro 2010). Selective interventions are targeted to those whose needs are not met by the market, the family or another sector. Social protection aims to reduce risks. The risk literature acknowledges imperfect information, market failures, externalities and other factors that would not allow for market insurance to operate.

Proponents of universal policies argue that there are moral, economic, political and social justifications to implement universal programmes (Boston & St John 1999). Universal policies reduce the differentiation of services between those who can and who cannot pay. They are based on rights and needs not on means.

The use of means testing in selective policies raises fundamental moral issues (Titmuss 1987). For example, decisions on how to compare different family

[24] Some literature considers targeting and conditionality terminologies interchangeable. Targeted benefits are conditional on meeting criteria (income, age group, existence of children). However, in this thesis, "conditional" benefits means transfers that are given only if the beneficiary engages in certain prescribed behaviours.

compositions, what to include in the test of means, the arbitrariness in establishing the income threshold, the support or penalisation of carers or of women in childbearing age - all of those decisions involve equity and moral values. Universal policies are, therefore, less paternalistic and intrusive.

Advocates of universal policies claim that they have better resource allocation than targeted policies (Boston & St John 1999; Townsend 2004). They are not as complex or as administratively expensive to run. Without the use of means-testing, universal policies reduce significantly type I or type II errors. Type I errors occur when truly eligible individuals have their claim rejected due to errors in the process. Type II error occurs when ineligible individuals apply for the benefit and have their claim accepted. These errors generate incomplete take-up and poor coverage.

Furthermore, universal policies do not carry negative work economic incentives or discourage savings (Townsend 2004,2007). Targeted subsidies influence people's economic behaviour, generating incentive distortions (Sen 1995). Beneficiaries may be able to adjust their economic circumstances by taking less employment to avoid losing the benefit, resulting in economic and social costs.

Universal policies are politically sustainable and socially integrative. Given that they benefit a wider population base than selective policies, taxpayers finance programmes that they may have or will have benefitted from, promoting social solidarity and cohesion.

Proponents of selective policies, in their turn, argue that targeted policies are efficient, equitable, have lower fiscal costs and promote altruism (Boston & St John 1999). With governments' scarcity of resources and fiscal constraints, the lower amount of resources should be efficiently allocated to those in greatest needs. Often, proponents argue that selective policies can enable governments to transfer to those in highest needs higher levels of support. Thus, the wide base of beneficiaries makes universal policies inequitable, as they equally treat the poor and the non-poor.

Universalists question the assumption that selective policies easily reach those in greatest needs (Standing 2007) and generate higher levels or quality of support (Sen 1995). Problems with the administration of benefits and means-testing as well as the additional costs to run the system have an impact on coverage, take-up and benefit

levels. Furthermore, targeted programmes are more easily subjected to budgetary cuts and political interference than programmes that also benefit the middle-class (Skocpol 1991).

Advocates for targeting emphasise that these policies contribute to altruism, charity and philanthropy in society. Private charities can combine assistance with socially accepted behaviours. They work with the "deserving poor". The government continues to have an important paternalistic role to play (Mead 1997). The government has the power to withdraw benefits, to put into effect conditions or requirements specific to groups, and to enforce basic agreements of the social contract in the sphere of rights and responsibilities.

In addition, universal programmes are inefficient and have a regressive redistributive impact (Boston & St John 1999). Targeted policies are more efficient because they contribute more to economic growth by freeing up public expenditure and taxation that could increase profitability, innovation and private savings and reduce the dependency on the state. Targeted policies are progressive as benefits are directed to the poor. Conversely, the wide base of beneficiaries results in "middle-class capture", or a high proportion of beneficiaries from the middle-class.

However, universalists counter-argue that the redistribution assessment depends on how tax revenue would have been spent otherwise and on how much social assistance received is in relation to household income (Boston & St John 1999). Undoubtedly, social assistance represents a higher proportion of the poor's income than the rich's although they may be eligible for the same amount of assistance. Furthermore, vertical redistribution is not the only goal of the welfare state. There is also horizontal redistribution (e.g. from employed to unemployed; from those without children to those with children) or non-redistributive goals, like social solidarity, wellbeing and social cohesion.

Proponents of universalism have suggested that the more benefits are efficiently targeted, the less likely it is that poverty and inequality will be reduced - "the paradox of redistribution" (Korpi & Palme 1998). Sen (1995 p.14) famously wrote that "Benefits meant exclusively for the poor often end up being poor benefits"; the poor are too politically weak to sustain quality of services.

However, the inverse relationship between targeting and redistribution, as claimed by the paradox of redistribution, has been contested more recently (Hills 2014). Marx *et al.* (2013), using data from the Luxembourg Income Study, found that there is no clear relationship between targeting and redistribution for the mid-2000. The authors attribute this to shifts in the countries' positions towards universal or targeted policies, and the inclusion of new data points (i.e. new countries). It is higher social spending that seems to influence whether targeting is associated with higher redistribution or not.

Other researchers have empirically demonstrated the association between high levels of social expenditure and lower levels of poverty in OECD countries (Cantillon 2009; Townsend 2007). Furthermore, as Cantillon suggests, it is unproven that reductions in government social spending can be compensated for by economic growth and higher levels of employment.

Nonetheless, targeted interventions in both developed and developing countries came to dominate in the 1980s. This shift to targeting reveals the "crisis of universalism" due to several reasons (Mkandawire 2005). Aside from the growing support of free-market economics, as discussed previously, other reasons are: critiques of the state's capacity to redistribute; limited fiscal resources; and changes in the aid discourse for poverty reduction.

Moreover, targeting specialists point to the growing body of evidence on the benefits of selected interventions in developing countries (Fiszbein & Schady 2009; Grosh *et al.* 2008). The benefits of these interventions include poverty reduction, increases in the numbers and proportions of those targeted, and improvement in school and health outcomes – all with low stigma and within the limits of states' budgets.

However, the welfare state has many goals, and hence it is necessary that objectives in social protection policies are clearly identified (Atkinson 1993). Often individual social policies themselves have multiple objectives. Some of these may require targeted interventions; others may require a broad universal frame.

Based on the discussion above, the current status of the debate is in favour of what Bird *et al.* (2010a) propose: a mix of targeted and universal policies, including macro and sectoral strategies. Targeted policies would address specific household needs and

universal policies would attempt to address structural factors that contribute to high poverty rates, such as services, infrastructure, *etc*. Universal policies also address broader goals of nation-building and the transfer of goods, services and ideas (Townsend 2007).

Conditional versus unconditional transfers

Behavioural conditionalities have the underlying assumption that the reason individuals are in poverty is because of their actions or inactions ("underclass" and "culture of poverty"). Thus, cash transfers dependent upon carrying out prescribed behaviour ("conditions") are intended to lead them towards exiting poverty.

Arguments in favour of conditional transfers can be grouped on social, economic, political and operational reasons. Arguments based on social reasons tend to emphasise the nature of the social contract. As part of a social contract, state and beneficiaries have "mutual obligations", they are partners with "co-responsibilities". Both terms used in exchange for conditionalities. Understood as a co-share of duties and obligations, the benefit, therefore, is not framed as a handout or entitlement and the state is not perceived as a "nanny state" (Fiszbein & Schady 2009). As Sawhill (1989 p.5) puts it "If they are poor despite having abided by the rules, society is much more likely to come to their rescue". In other words, assistance is more likely to be given to those who abide by social norms.

The economic reasons in favour to the use of conditionalities relate to how conditionalities build on human capital breaking the intergenerational transmission of poverty. Conditionalities act as economic incentives to address low levels of private investment in human capital. The reasons why children may have lower private investment in human capital relates to (i) perceived lower rates of return ("misguided beliefs"), i.e. beliefs that the returns to education are lower than they actually are; and (ii) parents making decisions for their children and heavily discounting the future demanding less education than the children's optimal ("incomplete altruism") (Fiszbein & Schady 2009 p.9). The long-term effects of a healthier and more educated work force are economic growth and poverty reduction.

Conditional transfers contribute to intra-household efficiency gains. Transfers to the female household heads empower females in the intra-household decision making and

help them to efficiently balance family budgets (Britto 2008; Cedeplar & SAGI 2007).

Conditional transfers also make the implementation of benefits politically feasible. Taxpayers are more willing to pay for programmes to assist the poor if payment is conditional upon approved behaviour (Britto 2008; Fiszbein & Schady 2009). Politicians are able to win votes both from the poor who now have a benefit and from conservative sectors of society who perceive this policy as a *quid pro quo*. Furthermore, introducing new programmes may be easier than reforming old supply-side programmes (Britto 2008).

Operationally, it can be argued that conditional transfers can improve service take-up (i.e. increased participation of children in schools and health centres) and social assistance intermediation (e.g. social workers coordinating policies to answer a particular family need) (Barrientos 2013b; Bastagli 2009; Britto 2008; Lindert *et al.* 2007). They can also act as red flags, triggering the possible use of additional public services, thus leading to agency coordination.

As for international development agencies, conditionalities provide a framework for monitoring outputs and poverty reduction. Monitoring school attendance and vaccinations, for example, are quick ways of ensuring that aid is disbursed efficiently and targeted to the vulnerable (Hall in press).

Critics of conditionalities advocate unconditional transfers. The preference for unconditional transfers unifies liberals and egalitarians, but with diverging arguments. As Mead (1997 p.23) states, conditional policies, which he sees as part of a "new paternalism"[25], question the "competence assumption" of "individual efficacy" whereby people are left to make their own choices.

Egalitarians argue that conditions are discriminatory as they apply only to those who receive transfers (Hanlon *et al.* 2010). Conditionalities create a dual society and have the potential to reinforce poverty, segregation and inequality. The poor, whom conditionalities are imposed upon, have a different set of rights and responsibilities

[25] This new paternalism differs from the "old" because (i) it is more linked to welfare-to-work with tighter means testing and behavioural conditionalities, and (ii) it is central government-led. The conditions are federally-controlled, based on automated services, efficiency and evaluation techniques. See Mead (1997).

than the majority of the population. They are regarded, therefore, as second-class citizens. Townsend (2007 p.ix) points out that punitive social assistance is "counter-productive for social cohesion", also impacting on well-being and productivity".

Hall (2006) and Barrientos (2013b) highlight the need to focus on the supply-side reforms. Monitoring school attendance, for example, diverts attention away from long-term structural social reforms, which relates to access, quality and availability of services to an acceptable level. In addition, some of the administrative costs to implement conditionalities are too heavy for some developing countries and there is often limited implementation capacity (Britto 2008; Schubert & Slater 2006).

Altman (2005) makes the case that conditionalities disregard other forms of cultural goods in communities, such as customary goods and services which are not usually commercialised. Altman proposes a model to reconcile customary, state and market sectors in Australian indigenous societies (i.e. the "hybrid economy"). Conditionalities imposed on individuals do not capture the complexity of one's relationships in a broader cultural role in society.

Molyneux (2007) questions the assumptions that conditional cash transfers empower female household heads, as they are the kinds of conditions that reinforce women's traditional caring roles. These traditional roles sit in a space where "disempowering gender asymmetries are reproduced" (p.72). Furthermore, the empowerment provided by being the recipient of the income disregards women's vulnerabilities and their own needs to exit poverty. Long-term insecurity, lack of support for care and weak market links are poorly incorporated (if incorporated at all) on the design of the programme.

Lastly, there is evidence that unconditional transfers have also improved school enrolment, school attendance, benefit take-up, health and nutrition status of girls as well as reduced child labour (Case *et al.* 2005; Duflo 2003; Edmonds 2006). In other words, conditionalities are not necessary to build on human capital. The poor make sensible decisions with unconditional transfers (Hanlon *et al.* 2010). The probability of living in poverty is more directly related to structural inequalities than to agency and behaviour.

However, targeted benefits are increasingly being used, and so are conditionalities, which are on the rise in both developing and developed countries (Fiszbein & Schady 2009; Gregg 2008). But what do evaluations of conditional transfers say?

Fiszbein and Schady (2009) reviewed the evidence of CCTs and concluded that they had a positive impact on household consumption, income poverty, food consumption, reduction of child labour, school enrolment rates and the use of health services. They were also found to have small effects in reducing fertility, and a modest effect on labour participation. These results were compatible with another CCT review conducted by Grosh *et al.*(2008).

The World Bank conducted another review of 123 cash transfers (conditional and unconditional) and reported that CCTs were found to have improved per capita consumption by between 7% and 29%, and to have had an impact on children's enrolment of between 0.6% and 12.8% (Garcia & Moore 2012 pp.155, 156). Although the World Bank report highlights the positive impacts of CCTs, it also says that "most studies have been inconclusive on the exact effects of conditions" (p.115). The only study cited that analyses this difference in the African context (see next bullet point) raises questions about the trade-off between conditional and unconditional transfers, the report says. It also expresses doubt about the replicability of the experiment.

A randomised control trial[26] in Malawi (Baird *et al.* 2011) found that both CCTs and unconditional cash transfers (UCTs) reduced dropout rates, but UCTs' effect is 43% as large as that of CCTs. CCTs also showed a modest but significant advantage on learning outcomes. However, UCTs resulted in lower teenage pregnancy and marriage rates than CCTs. The likelihood of being pregnant or married were 27% and 44% lower in UCTs than in the control group, whereas the CCT group showed small and statistically insignificant impacts. "Hence, the success of conditionality in promoting the formation of human capital among the compliers appears to be achieved at the cost of denying transfers to noncompliers who are shown to be particularly at risk for early marriage and teenage pregnancy" (p.5).

[26] In the experiment, 176 enumeration areas (comprising of approximately 250 households) were randomly assigned treatment (cash transfers) and control (no transfer). Of the treatment group 88 were assigned transfers conditional on attending school, while another group had unconditional transfers.

A systematic review of reports on conditional and unconditional cash transfers was carried out to assess the relative effectiveness of conditionalities in educational outcomes in developing countries (Baird *et al.* 2013)[27]. The review showed that both conditional and unconditional cash transfers improved the odds of children being in school. The authors did not find any significant differences between conditional and unconditional transfers. The effect sizes on test scores were small but on school enrolment, conditional transfers had larger effects than unconditional transfers.

There is a growing consensus that middle-income countries have the administrative capacity and the broad supporting systems to implement conditional transfers, but that low-income countries are moving towards unconditional or soft/flexible[28] transfers (Baird *et al.* 2013; Garcia & Moore 2012; Schubert & Slater 2006).

Researchers have, nonetheless, identified limitations of CCTs – they are not adequate for every household, and they require an adequate supply of services and additional social protection programmes to address other vulnerabilities (Fiszbein & Schady 2009; Garcia & Moore 2012; Schubert & Slater 2006). The reviews identified some knowledge gaps in relation to limited implementation capacity, long-term outcomes, cost assessments and, most importantly, on the use of conditions per se (Baird *et al.* 2013; Garcia & Moore 2012). Thus, evidence suggests positive results, but it fails to make a conclusive case for targeting and conditionality.

2.3 The Bolsa Família Programme

2.3.1 Conditional cash transfers in Latin America: international development strategies

Developing countries have increasingly been turning to social assistance (Barrientos 2013b)[29]. Poverty reduction, once considered a by-product of growth, started to be

[27] The sample included 75 reports, with data from 35 studies (5 unconditional, 26 conditionals and 4 studies that directly compared conditional with unconditional), utilising quasi-experimental designs or randomised control trials.

[28] "Soft" conditions are those that, if unmet, do not result in automatic cancellation; "flexible" conditions are those implemented on specific locations or households or that are not closely monitored. See Garcia and Moore (2012).

[29] Social assistance is defined as "means-tested social security programmes designed to target benefits to poor people", and social insurance involves "contributory social security programmes that pool resources to provide benefits when needed" (2004 pp.xiii, xiv).

addressed with social assistance policies, mainly as a result of the realisation that social insurance would not address the challenges introduced by the 1980s labour market flexibilisation.

However, there is a historical link between social assistance with *assistencialismo*[30], rendering past experiences with social assistance programmes small, residual and highly clientelistic. In Latin America, there was a "perverse coalition between paternalism and policies based on populism", which has resulted in current social assistance policies still having a symbolic dimension of the compassionate paternal statesman helping the poor (Sposati 2007 p.438). This is one of the challenges in moving the understanding of social assistance towards a citizen, rights-based framework.

With such background in *assistencialismo,* it is no wonder that Latin America embraced the CCT wave. Conditionalities reaffirm the poor's responsibility to actively engage in behaviours that would lift them out of poverty, reducing the importance of the paternal statesman and the poor's long-term dependence on the state. The poor is categorised as deserving or undeserving to be assisted. CCTs' rationale, therefore, places social assistance even further away from an unconditional rights-based entitlement.

During the last decade, the innovative approach of CCTs slowly attracted the attention of international donors through low budget programmes[31] targeted to the education and health outcomes of poor households. These programmes moved from "home grown" CCT initiatives in Brazil and Mexico in the mid-1990s (Britto 2008), to 27 countries in 2008, reaching 53 countries in 2013 (World Bank 2014 p.xiii). The lending capacity of the World Bank, international implementation expertise, and intellectual research expertise, all played an important part in the global expansion of CCTs (Hall in press).

In 2001, the original World Bank strategy for Social Protection and Labour was still recommending vouchers rather than cash handouts (World Bank 2001a p.v)[32]. This

[30] Clientelistic political practices to influence electoral outcomes.
[31] Social safety nets averaged around 1.6% of GDP worldwide in 2014. See World Bank (2014 p. xiv).
[32] The World Bank uses "social safety net" and social assistance interchangeably. See Grosh *et al.* (2008 p.4).

strategy introduced the Social Risk Management Framework into poverty analysis. Safety nets were to be put in place to cope with shocks and to form and strengthen human capital so that the poor could improve their capacity to manage risks (or shocks), thus breaking the inter-generational transmission of poverty. This Framework was intended to provide people with springboards enabling them to move to activities with higher returns.

In its review of social protection and labour from 2000 to 2008, the World Bank (2009b) traced its movement from vouchers to conditional cash transfers. During this period, safety nets grew in importance within the Bank's Social Protection and Labour lending, rising from 23% in 2002 to 42% in 2007 (p.8). In 2009, the Bank released a review focused exclusively on CCTs, because of their overall positive impacts on poverty reduction (Fiszbein & Schady 2009). In addition, as Hall highlights (2008,in press), CCTs appeal to both the Bank and governments because of their political benefits, quick disbursements, easily monitored policy outputs and available technical expertise. They also shift the focus away from the structural causes of poverty and the requirement for long-term interventions. Although the Bank has emphasised the productive role of safety nets, there is a contradiction between the low transfer benefit on the one hand, and on the other, the belief that these same benefits can be used as springboards for productive activities through investment in human capital.

The Banks' new strategy (2012-2022) shows a substantial shift in the discourse: Social Protection and Labour is "a *central part* of the Bank's mission to reduce poverty through sustainable, inclusive growth" (World Bank 2012 p.xi - emphasis added). It aims to integrate social protection portfolios by addressing persistent poverty and promoting resilience in the vulnerable. The Bank aims to address equity through targeting, and to reduce poverty through productivity and job creation. There are 870 million people in extreme poverty in low-income countries without social assistance (World Bank 2014).

The rise of social assistance is not only about CCTs but also about unconditional cash transfers (Garcia & Moore 2012; Hanlon *et al.* 2010). In addition, Hanlon *et al.* (2010 p.10) propose the idea that there is a "quiet revolution" from the South that

breaks the development paradigm by providing broad coverage cash transfers directly to the poor.

2.3.2 Historical context of social assistance for the rural poor in Brazil

Social movements in rural areas started to emerge in the 1950s[33], focusing on the most crucial historical problem for the rural poor in Brazil: land redistribution. Brazil continues to be highly unequal in land distribution. Based on the 2006 Agricultural Census data, 84.4% of rural small farming agriculture establishments covered only 24.3% of occupied land (MDA 2009 p.3). Nonetheless, small-farm agriculture is the main supplier of food staples to the domestic market, with 87% of manioc, 70% of beans, and 58% dairy products produced by small farmers (MDA 2009 pp.7,8). Small-farm agriculture employs 74.4% of agricultural workers and it has 89% higher productivity (gross production value per hectare) than non-small-scale farming agriculture (MDA 2009 pp. 5, 11).

Unequal land distribution is a result of the power historically held by landlords, and the basis for the national priority given to the extensive modern export-led agriculture. The military regime (1964-1985) promoted what it called "conservative modernisation". In Brazil, this referred to the pact between national elites and large landowners to modernise agriculture while excluding those segments of the population without land, working rights or capital and with limited citizenship (Delgado & Schwarzer 2000; Ramos 2009). Instead of redistributing the land, therefore, the government used social policies to compensate small farmers, thus avoiding disruption of the established order (Delgado & Schwarzer 2000).

Social insurance policies for the rural poor started with the Prorural/Funrural (1963/1971) and the *Renda Mensal Vitalícia* (RMV - Lifelong Monthly Income, 1974/5). Prorural/Funrural was aimed at rural workers, fishermen and miners over 60 (Delgado & Schwarzer 2000). The RMV was aimed at people with disabilities and those above 70 who could not provide for themselves (Rocha 2013). Both policies

[33] The Catholic Church played an important role in the foundation of the peasant societies (*Ligas Camponesas*) fighting for land reform. The National Federation for Rural Workers (CONTAG) was created in 1963. The Rural Worker Statute (*Estatuto do Trabalhador Rural*) in 1963 was insufficient to establish social insurance and assistance for rural workers. The *Movimento dos Trabalhadores Sem-Terra* (Landless Worker's Movement) begun in 1985 and, today, it is one of the largest social movements in Latin America. It continues the fight for land reform. See Delgado (2000).

required contributions, albeit small, and formal engagement in work. Thus small farmers were residually covered, as the majority of them were not able to contribute to social insurance.

Social movements continued to emerge and they were a fundamental influence underpinning the 1988 Constitution (da Silva *et al.* 2004). The 1988 Constitution secures minimum guarantees based on a human rights framework. By promoting universal rights, the constitution introduces the legal framework of inclusive social policies rooted in citizenship principles, reducing policies guided by paternalism and *assistencialismo* (IPEA 2006). The constitution brought together social assistance, social insurance and health as the three pillars of the Brazilian social security system.

The Constitution had important implications for social assistance policies for the rural poor. It introduced a new rural pension (*Previdência Rural Social*) and repackaged the RMV as the *Benefício de Prestação Continuada* (BPC). The rural social pension[34] levelled up rural worker's benefits to one based on the minimum wage, and women were also given access to pensions (Delgado & Schwarzer 2000). The 1993 *Lei Orgânica da Assistência Social* (LOAS) regulated the BPC, which only started to be implemented in 1996 (Delgado & Schwarzer 2000).

However, there is a contradiction between the 1988 Constitution on the one hand, and on the other, the economic framework of minimal state intervention and maximum economic efficiency, prescribed during the neoliberal era of the 1980s (da Silva *et al.* 2004). This contradiction led researchers to say that social policies after the Constitution were a form of "restricted universalisation": an increase in public provision of services combined with encouraging competition of private and non-governmental services (IPEA 2006 p.8). These policies were also characterised by devolution to local municipalities and targeting of the extreme poor (da Silva *et al.* 2004).

[34] The contribution requirement to the Funrural/Prorural and the subsequent changes in the structure of rural pensions after the 1988 Constitution (*Previdência Social Rural*) incorporating them to the social protection system (*Regime Geral de Previdência Social*) led to some hesitation among scholars about whether to reclassify rural pensions as social pensions or social assistance benefits. Legally and institutionally, these programmes are assigned to social security (*previdência social- segurado especial*) but in practice their benefits are mostly non-contributory. See different opinions in Barrientos (2013a) and Rocha(2013).

2.3.3 Background of the Bolsa Família Programme

It was in this contradictory context of fragile attempts to implement universal policies based on the 1988 Constitution within a neoliberal ethos, that debates about the right to a guaranteed minimum income and the targeting of conditional social policies to the poor happened.

One important debate occurred between Senator Suplicy and the economist J. M. Camargo (Britto & Soares 2010; da Silva *et al.* 2004; Rocha 2013). In 1991, Senator Suplicy proposed a bill in the Senate for a national minimum income, the *Programa de Garantia de Renda Mínima*[35]. This project was based on a negative income tax transfer, and was intended to start with individuals of low income above the age of 60. Meanwhile, Camargo proposed an alternative cash transfer programme aimed at families with school-age children. Camargo criticised Suplicy's proposal for providing negative incentives to work, and for again leaving children unprotected by the social protection system.

Camargo's proposal of a targeted intervention, conditional on school attendance, along with Betinho's campaign[36] mobilising civil society on poverty issues, set the tone for a residualist social policy. All the elements for the *Bolsa Família* (BF) as a CCT were present: the background of "restricted universalisation" policies; the need to address child poverty; the harmful legacy of *assistencialismo* resulting in a distrust of social assistance policies; and a society that emphasised local participation through campaigns and individual agency for exiting poverty, the co-responsibility requirement.

The devolution of the 1988 Constitution allowed a period of "policy experimentation" (Fenwick 2013) and "municipal activism" (Barrientos 2013a). In 1995, two minimum-income initiatives conditional on school attendance were introduced in Brazil: in Brasília and Campinas. Both initiatives were aimed at families with school-age children, but they differed in their objectives. In Brasília, the programme

[35] Minimum Income Guarantee Programme, *Projeto de Lei da Câmara No.2561, 1992 (PLS80/91)* was later approved as Basic Citizenship Income (*Lei No.10.835, 08/01/2004*). It has not been implemented.
[36] The sociologist Herbert de Souza (*Betinho*) was a leader in the National Campaign of Citizens against Hunger, Misery and Pro-life (*Campanha Nacional da Ação da Cidadania Contra a Fome, a Miséria e pela Vida*) in the 1990s.

focused on school attendance, whereas in Campinas, the programme focused on the role of social assistance intermediation when children did not attend school (Rocha 2013).

In 1996, President Fernando Henrique Cardoso created the first federal CCT – the Child Labour Eradication Programme – PETI (Soares 2012a). In 2001, President Cardoso nationalised the successful municipal initiatives under the name of *Bolsa Escola (School Grant).* The President also created a *Bolsa Alimentação (Food Grant)*, targeted at low-income pregnant women and mothers with children up 6 years of age. In 2002, he created yet another cash transfer - the *Auxílio Gás (Gas Grant)*, aimed to subsidise fuel expenses. These programmes were part of the Social Protection Network (*Rede de Proteção Social*).

In 2003, the newly elected President Lula created the *Fome Zero* – a set of policies with the aim of addressing hunger and fulfilling his electoral promise that no Brazilian should go without three meals a day[37]. President Lula formally endorsed the "fight against poverty" as his social policy goal. As part of the *Fome Zero* initiative, President Lula created the *Cartão Alimentação (Food Card),* another CCT aimed at families with income per capita below half of the minimum wage –the threshold of all the above CCTs.

In October 2003, the *Bolsa Família* (BF) programme was created by Presidential Decree (*Medida Provisória No. 132, de 20 de Outubro de 2003*) and became law in 2004 (*Lei No. 10.836, de 9 de Janeiro de 2004*). It is an umbrella programme created to unify all the previous cash transfer programmes[38]. This unification into a single programme under a single ministry, the MDS[39], using the single registry *Cadastro*, was intended to reduce government costs.

The BF sidelined the *Fome Zero* project and became the flagship social policy programme during the Lula administration. This BF was implemented amidst the

[37] "So long as one of our Brazilian brothers or sisters is hungry, we can only be overwhelmed by shame … As I said in my first speech after the election, if, when I conclude my term of office, all Brazilians can have breakfast, lunch and supper, I will have fulfilled my mission in life." President Lula's speech in 2003.
[38] PETI was only included as part of the Bolsa Família in 2005 (*Portaria No. 666, de 28 de Dezembro de 2005*).
[39] The *Ministério do Desenvolvimento Social e Combate à Fome* (Ministry of Social Development and the Fight against Hunger) was created in 2004

debates of minimum income as a constitutional right, advocated previously by Suplicy. The BF was seen both as part of a residual social safety net, and as a very first step towards the consolidation of the Basic Citizenship Income Law (*Lei No.10.835, 08/01/2004*)[40] (Britto & Soares 2010; da Silva *et al.* 2004).

Two important innovations in the Bolsa Família departed from the previous CCTs (Rocha 2013). The first was to divide beneficiaries into two poverty levels: extremely poor families with monthly household incomes of R$50 or less, and poor families with monthly incomes between R$50 and R$100[41]. While these two poverty levels gave priority to larger households with children, they also allowed for small households in extreme poverty to be included in the programme independently of the numbers of children. The second important difference was the use of an administrative poverty line, which meant there was no indexation of the poverty line with the minimum wage.

In 2004, the World Bank released the report, "Rural poverty alleviation in Brazil: towards an integrated strategy", signalling international concerns about rural poverty in Brazil. In another technical document to the Government of Brazil, the Bank recommended that the registration of eligible beneficiaries in the *Cadastro* take into account the "different local realities reflecting urban vs. rural settings (including population and poverty density) and diverse cultural, ethnic and racial characteristics of the populations" (World Bank 2004a p.2). However, despite these recommendations and the historic deprivations of the rural population, no evident changes were made in the design and implementation of the BF to address the rural poor specifically.

2.3.4 The Bolsa Família: the programme, institutional arrangements and evaluations

The BF is a non-contributory programme designed to provide monthly cash payments to targeted households whose per capita income is below an administrative poverty line. The cash benefit requires households to fulfil obligations associated with education and health. Families have to enrol for the programme at their local or

[40]The Basic Citizenship Income Law, although approved, was never implemented.
[41] The thresholds of R$50 and R$100 are approximately equivalent to US$17.32 and US$ 34.65, as of 02/01/2004.

mobile CRAS (*Centro de Referência de Assistência Social* – social assistance centre). *Cadastro* gathers information about all potentially eligible beneficiaries at the national level. Families receive an electronic benefits card that they use to withdraw their benefits at a nearby bank or similar institutions (i.e. banking correspondents[42]). Benefits vary according to household income and composition. In 2009, the benefit reached 22.2% of the population. The programme costs less than 0.5% of Brazil's GDP (Soares 2012a p.6).

The programme overview

Article 4 of the *Decreto No. 5.209, de 17 de Setembro de 2004* outlines the BF objectives, which are:

(i) to promote access to public services, especially health, education and social assistance;
(ii) to fight poverty and promote food and nutritional security;
(iii) to stimulate sustained exit of families out of poverty and extreme poverty;
(iv) to combat poverty; and,
(v) to promote cross-sector links, complementarity and synergy of social actions from the public sector.

The programme is intended to be a temporary measure to promote synergies between different sectors helping families to exit poverty. Article 21 of the above *Decreto* states: "granting the Bolsa Família benefit is a temporary measure and it does not generate vested rights". This is further reinforced by *Decree 6.392, de 12 de Março de 2008*, which adds the need to review the family's eligibility every two years.

The above legislation shows the programme's stated role as a safety net and a residual policy. The practices in the last decade towards improving targeting, monitoring of conditionalities, and exiting through the labour market, mark a move away from an unconditional minimum income (Britto & Soares 2010). However, the legislation does not set an upper time limit beyond which families are ineligible for staying in the programme.

In addition to the two poverty levels, there are two benefits: a basic benefit for the extremely poor, and an additional variable benefit depending on the number of

[42] Banking correspondents are institutions (e.g. post offices and lottery agencies) authorised by the Brazilian Central Bank to provide financial services in areas where banking services are limited or non-existent.

children, up to a maximum of three benefits per family[43]. In 2008, the programme included teenagers in the variable benefits, up to a maximum of two per family. Changes in the benefit amounts and eligibility thresholds from 2004 to 2010 are summarised below:

[43] In 2011, the number of child benefits was raised to five per family (*Lei No.12.512, de 14 de Outubro de 2011*).

Table 1: Eligibility and benefit levels, 2004 - 2010

Legislation (minimum wage)	Eligibility threshold		Benefit levels	
	Extreme poor	Poor	Basic benefit(1)	Variable benefit (2)
***Lei* No. 10.836, 2004**	R$50 *(US$17.32)*	R$100 *(US$34.65)*	R$50 *(US$17.32)*	(*)R$15 – R$45 *(US$17.32–US$15.59)*
***Decreto* No. 5.749, 2006**	R$60 *(US$25.67)*	R$120 *(US$51.35)*	R$50 *(US$21.39)*	(*)R$15 – R$45 *(US$6.42–US$19.26)*
***Decreto* No. 6.157, 2007**	R$60 *(US$28.11)*	R$120 *(US$56.23)*	R$58 *(US$27.18)*	(*)R$18 – R$54 *(US$8.43–US$25.30)*
***Lei* No. 11.692, 2008**	R$60 *(US$33.86)*	R$120 *(US$67.71)*	R$58 *(US$32.73)*	(*)R$18 – R$54 *(US$10.16 –US$30.47)* (†)R$30 – R$60 *(US$16.93–US$33.86)*
***Decreto* No. 6.491, 2008**	R$60	R$120	R$62 *(US$34.98)*	(*)R$20 – R$60 *(US$11.29–US$33.86)* (†)R$30 – R$60
***Decreto* No. 6.917, 2009**	R$70 *(US$30.05)*	R$140 *(US$60.09)*	R$68 *(US$29.19)*	(*)R$22 – R$66 *(US$9.44–US$28.33)* (†)R$33 – R$66 *(US$14.16–US$28.33)*

(1) Basic benefit, unconditional: given to households below the extreme poverty line.

(2) Variable benefit, conditional, given to all households according to household composition and dependent on fulfilment of education and health conditionalities: (*) indicates benefits associated with children up to 15 years of age , maximum 3 benefits per household, and (†) indicates benefits associated with teenagers between 16-17 years, up to 2 benefits per household.

Note: changes introduced by each legislation in blue; dollar values as of 02 January each year. After 2009, there were an additional two updates on the benefit levels (see *Decreto* No. 7.494, 2011 and *Decreto* No. 8.232, 2014).

Sources: legislation cited, dollar values from BACEN (2014).

Table 2 shows that increases in benefit levels were in accordance with minimum wage increases, and that benefits were calculated as a (small) proportion of the minimum wage.

Table 2: BF benefit range, 2004 - 2010

Legislation (minimum wage)	Benefit range (% min. wage) Min = 1Basic benefit Max = 1Basic Benefit + 3/5[(1)] Variable Benefit
***Lei* No. 10.836, 2004** (R$ 260)	R$15 – R$95 *US$5.20 – US32.92* (6% - 37%)
***Decreto* No. 5.749, 2006** (R$ 350)	*US$6.42 –US$40.65* (4% - 27%)
***Decreto* No. 6.157, 2007** (R$ 380)	R$18 – R$112 *US$8.43 –US$52.48* (5% - 29%)
***Lei* No. 11.692, 2008** (R$ 415)	R$18 – R$172 *US$10.16 –US$97.05* (4% - 41%)[(1)]
***Decreto* No. 6.491, 2008** (R$ 415)	R$20 – R$182 *US$11.29–US$102.70* (5% - 44%)
***Decreto* No. 6.917, 2009** (R$465)	R$22 – R$200 *US$9.44–US$85.84* (5% - 43%)

(1)In 2008, the variable benefit included up to two benefits per households for teenagers.

Source: legislation cited, dollar values from BACEN (2014).

Conditionalities associated with the BF have also changed over the years, although slightly, as outlined in Table 3. The basic benefit is unconditional, whereas the variable benefit is conditional. Lack of compliance with conditionalities does not result in immediate cancellation of the benefit ("soft" conditionalities). Families are warned and benefits are temporarily blocked or suspended prior to cancellation.

Table 3: Conditionalities

Legislation	Education	Health
***Lei* No. 10.836, 2004**	• 85% school attendance (6-15 years old)	• Pre-natal • Nutritional follow-up • Health follow-up (not detailed)
***Decreto* No. 5.209, 2004**	• Same as above	• Pre and Post-natal assistance • Vaccination • Food and nutritional follow-up of children up to 7 years old • Child development and growth
***Lei* No. 11.692, 2008** ***Decreto* No. 6.917, 2009**	• Same as above • 75% school attendance (16-17 years old)	• Same as above

Source: legislation cited.

The objective related to beneficiaries exiting the programme (Art 4, iii, *Decreto No. 5.209*) gave rise to a debate on terminology in Brazil. The World Bank frames this as "graduation agenda" and "exit doors" (Lindert *et al.* 2007). Although the Bank recognises the role of the social worker as a mediator, the Bank focuses on the ideas of "reducing welfare dependency" and promoting "empowerment" and "emancipation" (p.92). The Government of Brazil prefers the terminology of "entrance doors", either to the labour market or to other programmes (*Programas complementares*) (Soares 2012a p.14). Both discourses, however, emphasise what individuals themselves can do to exit poverty, disregarding the structural causes of poverty.

Institutional framework and operationalisation

The idea that the BF is a "unifying force for social policy in Brazil" is a powerful representation of the programme's complexity (Lindert *et al.* 2007 p.7). The BF unifies both vertically by bringing together different levels of the federation, and horizontally by bringing different ministries together. Federal, State and Local (municipal) governments all have responsibilities, while ministries and secretariats of health, education and social assistance must contact each other to supply information on conditionalities.

The core BF institutions, analysed in this thesis, are the MDS, CAIXA and local municipalities[44]. The *Cadastro* links local with central government. MDS has several secretariats involved in the BF. There is SENARC[45] that oversees the *Cadastro* and the overall implementation of the BF programme in relation to conditionalities, social control, complementary programmes, monitoring, and support to the municipalities. SAGI[46] is responsible for evaluations of the programme. CAIXA is a publicly owned savings bank. It manages the *Cadastro*, assigns a unique Social Identification Number[47] to beneficiaries, distributes electronic benefit cards,

[44] State governments have a role supporting municipalities with training and logistic support, including strategic support to issue identification documents (*Portaria* No. 360, 12/07/2005).
[45] SENARC (*Secretaria Nacional de Renda da Cidadania*) is the National Secretariat of Citizen Income. Its name is a result of the historic debates on basic income, previously outlined.
[46] SAGI (*Secretaria de Avaliação e Gestão da Informação*) stands for Secretariat for Information Management and Evaluation.
[47] NIS – *Número de Identificação Social.*

and makes monthly payments to beneficiaries using its extensive network of banks and banking correspondents.

Local municipalities are the main players for programme implementation. They are responsible for the registration of beneficiaries, the *Cadastro* quality, and compliance with conditionalities. Important local institutions that I will refer in this thesis are the CRAS, where beneficiaries register, and the ICS (social councils), civil society mechanisms that oversee the implementation. These two institutions are important for identifying the persistently poor, who may be in remote villages.

The operationalisation of the benefit is as follows. Local municipalities register the families, who then must wait for their benefit. They will be informed by CAIXA that they have been selected. Households can also check their status at the local administration or by calling a federal 0800 number. CAIXA issues the card to the household head, preferably the mother. In most municipalities, the card is sent to the household postal address and takes 45 days to arrive. Before the card arrives, the mother must present identification to the CAIXA cashier in order to withdraw the benefit. In small municipalities, CAIXA sends the card to the local post office. The family has 20 days to pick it up, otherwise, it is sent back to the nearest CAIXA. Upon the receipt of the benefits card, mothers can withdraw at CAIXA and at banking correspondents at any municipality. In 2009, MDS took over some of these responsibilities from CAIXA, including the overall payment supervision (*Decreto* No.7013, 2009). Also in 2009, financial inclusion policies were introduced, which allowed benefits to be deposited directly into a beneficiary's bank account, if they have one (Lei No. 11.692, 2009).

Benefits are paid monthly to the household head registered at the *Cadastro*. If the mother loses the card, she can only withdraw money at CAIXA. If she cannot personally withdraw the benefit, she has to register a power of attorney signed by the Mayor's office allowing another person to withdraw the benefit on her behalf. If the benefit is not withdrawn for more than three months, it is returned to the BF federal account. This is not the case when the beneficiary has a bank account.

Evaluation studies

The BF programme has been recognised by international bodies such as The World Bank (2009a) and The International Social Security Association (2013). The success of the BF model nationally has been demonstrated by the commitment to this policy by different political parties, and internationally by the expansion of CCTs to other countries. There is a growing literature on the topic, and I outline some of the studies below.

SAGI commissioned a longitudinal evaluation study of the BF programme[48]. Given that the programme was created as an amalgamation of previous programmes, there was no space for randomised control trials, and SAGI resorted to two waves of data collection to build a quasi-experimental evaluation, using treatment and control groups, propensity score matching and double or single difference methods (de Brauw *et al.* 2010a,2011; de Brauw *et al.* 2010b; MDS 2010b).

The evaluation showed improvements in health and education. In terms of health conditionalities, there were 10.7% more girls being born full term in 2009 than in 2004 and 5% more timely vaccines of diphtheria-tetanus-pertussis and polio (of babies up to 6 months old). There was an improvement of 0.2 standard deviation weight-for-height but no impact on height-for-age and rural households were more likely to receive home visits by health agents. As for impacts on education, there was a 4.5 % increase in school attendance, with a larger impact for females and concentrated in the Northeast of Brazil. In addition, girls aged 16 and 17 were more likely to progress to the next grade level and less likely to repeat grades.

However, there are some mixed results as to how much beneficiaries understand their obligations to meet education and health conditionalities. Although 89% of beneficiaries correctly identified education statements and 91% of beneficiaries correctly identified health (>91%) statements relating to the conditionalities, 41% and 43% of respondents did not acknowledge the existence of conditionalities of education and health, respectively. There were also misunderstandings about

[48] The first wave of data collection went to the field in 2005 (baseline), and the second in 2009. In 2005, there were 15,426 households in 269 municipalities and 23 states. The attrition rate by 2009 was 26% due to location problems and 18-19% of the weighted sample in both periods of time was rural (excluding the rural North, 2005).

statements like “bring your own lunch” and “grant must be used to purchase school supplies”.

Let us suppose that beneficiaries fully understand the conditionalities requirements, it is important to point out that 53% and 78% of rural households found it difficult to meet education and health conditions, respectively, due to poor physical access to services. Plus, even if they are able to access them, quality of education and health services seem to have not improved sufficiently. Just over 50% of parents reported improvements in education, e.g. school registration, teacher’s attendance, infrastructure, and attention given to students. The remaining parents thought that education services were the same. In the case of health services, parents thought that they had remained the same throughout the period analysed.

In terms of labour force participation, there were a lower proportion of recipients not working in 2009 than in 2005 in rural areas. There was also some evidence that rural recipients worked more hours in the informal sector.

Three-quarters of the registrations in rural areas were conducted in a government office, school or health post. However, even if the rural poor register for the benefit, the travelling time for collection is an issue that should concern evaluators. 65.5% of urban beneficiaries took less than 30 minutes, whereas 54.9% of rural beneficiaries took more than 1 hour, 32.5% took 2 hours or more to reach the collection post.

Another study, using mixed methods, was conducted by Ibase[49] in 2006-2007[50]. This study analysed BF impacts on food and nutritional security. The study found that extremely poor families increased their consumption of staple food (rice and beans) but not enough to guarantee satisfactory levels of food security. Households who were more vulnerable to hunger were those with mixed- or African-descendent household heads, who were rural, illiterate, engaged in informal work, and lacking sanitation. There was an urgent need to address issues like sanitation, school meals for secondary education, and access to formal markets.

[49] Instituto Brasileiro de Análises Sociais e Econômicas
[50] A survey of 5,000 individuals in 229 municipalities from September to October 2007, and 15 focus groups (170 beneficiaries) in 15 urban areas from June to July 2006.

Among the findings specific for the rural population, the study found that although rural families engage in subsistence agriculture, 95.5% had no technical assistance, 83.1% had not accessed agricultural credit in the last three years. For consumption goods that are not produced, households living in remote areas pay higher prices at local shops.

A very important finding for this thesis concerns the time and costs for rural households to collect the benefits. IBASE study reaffirms the disadvantages of rural beneficiaries. 15% of rural beneficiaries took between 2 and 4 hours, and 23.6% took more than four hours. 29.5% spend between R$5−R$15 (US$2.34−US$7.03 as of 02/01/2007), 5.7% spent more than R$15. Using the 2007 benefit range, as described in Table 2, households at the minimum benefit level would have spent between 28% and 83% of their benefit in transportation costs, and households at the maximum level of benefit, between 4% and 13%.

Based on the above, there are important rural dimensions in the implementation of the BF that deserve to be further investigated.

Other areas of research are targeting and redistribution. In general, studies of targeting have indicated that the BF is a well-targeted programme, coming first of 44 programmes in the Latin America and Caribbean (Lindert *et al*. 2007). Using the 2004 PNAD, Soares, Ribas and Osório (2007 p.2) calculated inclusion targeting as 41% and exclusion targeting of 92%; 59% of exclusion error and 49% of leakage[51]. Using the 2005 and 2007 *Cadastro*, Bastagli (2008 p.201) calculated the predicted probability of inclusion of the extremely poor in rural areas as 56%, and of the poor as 49%.

According to Grosh *et al*. (2008 p.24), the role of cash transfers "in redistribution is obvious and can be effective". Targeted cash transfers are redistributive if they are efficiently directed to those in need. The authors estimate that the BF reaches about a quarter of the population with transfers making up about a quarter of their household income.

[51] Inclusion targeting is the rate of poor beneficiary over the total poor. Exclusion targeting is the exclusion of the non-beneficiary non-poor to the total non-poor. Exclusion error (under-coverage) is rate of the non-beneficiary poor to the total poor population. Inclusion error (leakage) is the error of including the non-poor over the total of the beneficiary population.

An OECD (2008) report drew attention to different types of impacts of social programmes, namely targeting, progressivity and redistribution. According to this report, redistribution refers to the question, "how much does the benefit system actually *change* the distribution of household income?" (p.100) (emphasis in original). Although the programme is well-targeted it does not change the distribution of household income. That would require labour market insertion, or a larger public transfer equal to the minimum wage, such as the BPC or the rural pension (Osorio *et al.* 2011b).

Building on this discussion, other analysts question the redistributive role of the BF, based on funding for social security in Brazil. Salvador (2010 p.250) analyses the period of 2000 to 2007 and finds that 62.16% of the social security funding comes from sales taxes. However, the author neither details the marginal changes, making it difficult to infer whether sales taxes were mostly responsible for the introduction of the BF, nor disaggregate the consumption sales taxes. Couri (2010 pp.61,62) finds that the majority of the incremental changes on the social protection budget for the BF came from indirect taxes. Couri states that 14.5% of the BF sources of funding from 2004-2009 can be considered progressive. Although there is the need for more research on the topic, Salvador (2010 p.251) is categorical in affirming that "the analysis of revenue used to finance social security, from 2000 to 2007, reveal its regressive nature: workers and the poorest support it – thus, there is no income redistribution."

Lastly, the social work literature draws attention to the move towards emphasising social assistance in the social protection system. Thus, social assistance is a central policy, and not a mediating integrative policy that guarantees access to other social services and rights (Mota 2007 p.130). The social policy focus on social assistance hides the structural causes of poverty, precarious labour market arrangements, and processes of reproduction of social inequalities and capital accumulation (2010). This reinforces the residual nature of the Brazilian welfare state.

2.4 The Bolsa Família and CCTs: long-term strategy for social assistance and social development?

The study of the BF in rural and remote areas (RRA) is important not only for understanding how the programme addresses the persistently poor, but also for long-term social assistance strategies in Brazil and developing countries.

I started this chapter by outlining the international and national debates on poverty. I demonstrated that there is a consensus from the right and left sides of the debate that the persistently poor should be assisted and even prioritised. However, there is a disconnect between the many discourses about targeted anti-poverty programmes, and the lack of attention the international debates pay to the persistently poor in rural areas. The policies for the "easy-to-assist" follow a utilitarian approach of efficiency in delivering results. The persistently poor in rural areas may require a different set of policies from those currently being prescribed nationally and internationally.

The evolution of the social assistance debate, both internationally and in Brazil, helps us to understand why the BF is framed in terms of efficiency, targeting and conditionalities. I also showed the debates and tensions between the proponents of a minimum income and those favouring CCTs. These debates reflect a broader discussion on the role of the state in promoting social welfare.

The BF is considered a well-targeted programme, with positive impacts on poverty and inequality reduction, schooling and nutrition. However, the BF anti-poverty reduction strategy seems to have reached its peak, leaving the extreme poor in rural areas with double the poverty rates of urban areas (Rocha 2013 p.173). Research has also pointed out that CCTs are not a "magic/silver bullet" for anti-poverty measures – short-term needs must be balanced with long-term policies to address the structural causes of poverty (Barrientos 2013b; Hall 2006,2008).

Hence, there is the need to investigate the topic further. By understanding how the BF is reaching the persistently poor, and how it is implemented in remote rural conditions, I hope to shed some light on both the accomplishments and the limitations of the programme. This research may find that the well-targeted BF programme is achieving its comprehensive objectives. Alternatively, the BF may require further targeting or the persistently poor may need policies beyond CCTs.

The *Brasil sem Miséria* programme released in 2011by President Dilma Roussef is a move towards a new stage in targeting. It has the stated aim of ending extreme poverty, but by attempting to increase the inclusion of the extremely poor in social assistance. This highlights once again the importance of this thesis, which aims to provide inputs for policies to reach some of those who are excluded from social assistance.

In the international arena, there is a wave of cash transfers, conditional or otherwise, used as anti-poverty instruments. This helps to establish social protection institutions and policies in countries where they were absent or minimum (Barrientos 2013b; Bastagli 2009). However, eradicating poverty would require pro-poor growth and a broader social protection system, including access to quality social services (Barrientos 2013b).

There seems to be a conceptual dilemma. On the one hand, the proponents of CCTs affirm that conditional transfers are appropriate for addressing chronic or persistent poverty, as their focus on education and health is expected to have outputs across the generations. They argue:

> Because of their emphasis on long-term human capital accumulation and on administrative targeting, CCT programs are better suited as instruments for structural poverty than as responses to episodes of transient poverty. (Fiszbein & Schady 2009 p.196).
>
> It is important to note that transfers, at least public monetary transfers (in particular the conditional cash transfers programs that have expanded in the region [Latin America] during this period) were not meant to be an instrument for fiscal redistribution, but were aimed more at reducing chronic poverty and promoting human capital development. (World Bank 2011 p.1).

On the other hand, poverty experts highlight problems with infrastructure and social service provision in RRAs. BF evaluation studies (sub-section 2.3.4) demonstrated how the limited infrastructure in rural areas affects the real value of the benefit (e.g. through transportation costs), as well as affecting the access to education and health services. Thus, the use of conditionalities for the persistently poor in RRAs may require additional social investment, without which CCTs would have little or no effect. The factors that contribute to the persistence of poverty in RRAs may hinder the possibility of considering CCTs a long-term strategy for social development.

2.5 Critical assessment of the literature reviewed and implications for research

The literature reviewed showed that there is persistent and chronic poverty in RRAs, which cannot be only attributed to household characteristics, but also to how geographical location influence the existence of long-term structural poverty, access to services and reduced opportunities to exit poverty (Bird *et al.* 2002; Bird *et al.* 2010b; Bird & Shepherd 2003; CPRC 2005; Okwi *et al.* 2007). Despite the recognition by international development agencies of the relationship between remoteness and long-term severe poverty (IFAD 2001 ; World Bank 2001b), there is little attention in international development practices on spatial poverty traps, agriculture and rural economies (IFAD 2001,2010; World Bank 2004b,2009c).

This international debate reflects the Brazilian debate. Several reports, quantitative datasets and social indicators have highlighted the long-term, persistent, structural poverty in specific geographical areas of Brazil, more specifically the rural semi-arid of the Northeast of Brazil (IBGE 2010b; IFAD 2008; IPEA 2011; MDS 2011; Osorio *et al.* 2011b; World Bank 2003). However, despite its importance, there is no study of chronic poverty in Brazil due to lack of longitudinal datasets (Osorio *et al.* 2011b).

In addition, little attention is paid to rural poverty in Brazil. Some authors claim that rural poverty became less important with the larger concentration of population in urban areas and that the analysis of geographical patterns of poverty are not important given the convergence of poverty rates and income (Neri 2011; Rocha 2012). However, other researchers have demonstrated that the definition of urban areas questions the so-called "urbanisation" of Brazil (da Veiga 2001) and, most importantly, that the surveys used are not adequate to measure convergence or poverty, as they do not capture the heterogeneity of rural areas (Osorio *et al.* 2011a; Osorio *et al.* 2011b; World Bank 2003). These arguments raise serious questions on the claims of convergence or of reduced importance of rural poverty in Brazil.

Internationally, the ten year research programme on chronic poverty has provided an emerging body of evidence highlighting the need of universal and targeted interventions to assist the chronic or persistently poor (Bird *et al.* 2002; CPRC 2005; Hulme & Shepherd 2003). Amidst these interventions, there was an emergence of

social assistance programmes notably in the form of cash transfers to address poverty reduction (Hanlon *et al.* 2010). Conditional cash transfers rapidly emerged as an important policy option, rapidly expanding in the international development agencies portfolios (World Bank 2009b,2014).

The *Bolsa Família* is an international example of a successful conditional cash transfer programme (ISSA 2013; World Bank 2005) that covers the working-age able-bodied rural poor. BF evaluations have demonstrated targeting efficiency and positive effects on poverty reduction, short-term education and health outcomes (de Brauw *et al.* 2010a,2011; de Brauw *et al.* 2010b; MDS 2010b).

However, evaluations have also highlighted concerning findings on the implementation of this programme in rural areas, highlighting the disadvantage of rural beneficiaries. They are related to (i) the registration of the programme in rural areas; (ii) the time and costs of collecting benefits for the rural poor; (iii) the higher costs of goods in rural remote areas; (iv) the reduced level of supporting programmes, such as technical assistance, to promote the exit of rural poverty; (v) the insufficient attention paid to benefit levels in terms of food security for those reliant on subsistence agriculture; and (vi) the quality and access of services provided. In addition, there is no conclusive evidence differentiating the effects of conditions from those of cash (Baird *et al.* 2013; Baird *et al.* 2011) to justify the apparent higher costs borne by the persistently poor living in rural remote areas in order to comply with the conditions.

This chapter has identified gaps in the rural poverty and the BF literatures. There is not enough research on the chronic and persistently poor living in rural areas of Brazil. Rural areas are generally treated homogeneously, aggregated in national or regional rural averages due to data limitations. Research exploring rural linkages and their effects on policy implementation is also limited, if existent. Lastly, there is no research in the intersection of issues related to persistent poverty in rural remote areas with the effective implementation of the BF programme.

Considering that (i) persistent poverty in rural remote areas of Brazil is an important, albeit under-researched topic, (ii) the BF is both an example of an internationally recognised case of conditional cash transfers and of a policy that addresses the able-

bodied working age rural population; and (iii) that BF evaluations have identified causes for concern in terms of the implementation of the benefit in rural areas of Brazil, then, an analysis of the BF with the specific lenses of how effectively the programme is reaching out and addressing the needs of the persistently poor living in remote rural areas is paramount. Emerging from this analysis, I propose to investigate the following research questions:

RQ1: ***"How effectively does the Bolsa Família reach the rural poor in remote and non-remote poor rural municipalities?"***

RQ2: ***If it is not effective, why not?***

d) Reasons related to the policy design at the national level

e) Reasons related to the local implementation at the municipal level

f) Reasons related to the households' participation at the community level

The investigation of the BF programme with the specific lenses of maximising effectiveness of the reach of the BF to the persistently poor in rural remote areas will also shed some light on important unexplored gaps in the literature related to the BF programme.

No research has been conducted to verify whether the BF is reaching out to the persistently poor in rural remote areas; if the persistently poor in these areas are prioritised, given the limited funds for benefits; how remoteness affects the national and local implementation of the BF; and how remoteness affects household participation in terms of registration, compliance with conditionalities, collection of benefits and social control.

This research looks at effectiveness in terms of both service provision and needs. This means that I will also analyse whether cash funds address the primary needs of the persistently poor; the effects of conditionalities for the persistently poor, who generally live in places with supply-side problems; and the costs of the programme for local administrations and beneficiaries in the heterogeneous rural spaces. If the costs for the persistently poor are higher due to location, this should be taken into consideration in the policy design, mainly in programmes with conditions attached to benefit, like CCTs.

The originality of this research lies in three points. Firstly, previous researchers have looked at chronic and persistent poverty and RRAs internationally; other scholars have analysed the BF, its targeting and implementation and household participation in the programme. However, as stated before, no previous research has combined those issues.

Secondly, I provide a broad analytical picture by addressing the research questions at the national, local and household levels. I use mixed-methods to understand the overall quantitative trends, together with the non-observable variables or contextual processes uncovered by qualitative datasets.

Lastly, given that we do not know much about chronic poverty in Brazil, I focus on persistent poverty and I use an innovative approach by combining different methods to identify locations that are remote rural and extremely poor. I propose an integrated approach to study rural Brazil, including population density, location and linkages to urban centres. This new method was necessary due to lack of longitudinal datasets and of surveys in RRAs.

However, it is important to also acknowledge upfront the limitations of this thesis. This research does not cover all the beneficiaries of the *Bolsa Família* in Brazil; neither does it cover the whole rural population. Given the lack of quantitative datasets for the rural chronic poor, this thesis does not aim to provide statistical generalisations or causality. Additional studies would be needed to reinforce the findings. Although this thesis may provide insights into the international debate, careful consideration must be given to assess the relevance and applicability of its findings.

3. METHODS: TYPOLOGIES OF RURAL MUNICIPALITIES, QUANTITATIVE AND QUALITATIVE DATASETS, SELECTION OF CASE STUDIES, AND ANALYTICAL FRAMEWORK

The exclusion of many chronically poor people from official statistics both reflects and reinforces their position of marginality and vulnerability, often rendering them invisible, even to humanitarian organisations and their own governments. (CPRC 2005 p.15)

3.1 Introduction

Although I recognise that there have been advances in poverty analysis in Brazil, there is little, if any, information on rural chronic poverty[52]. This reinforces the invisibility of those who face severe and persistent deprivation. To address this knowledge gap, I use a combination of methods aimed to answer the proposed research questions.

Although I am aware that quantitative and qualitative research strategies make different and distinctive epistemological and ontological assumptions, I take the pragmatic position that these strategies are both "techniques of data collection and analysis" that social scientists can draw upon while investigating a phenomenon (Bryman 2004 p.463).

Thus, I use quantitative methods alongside qualitative investigations, using statistical data while addressing the processes necessary to evaluate policies. Quantitative analysis compares the participation rates and compliance with conditionalities of the rural poor in poor remote municipalities, with those in poor non-remote municipalities. Qualitative analysis investigates whether location and national, local and household dynamics influence the quantitative result, and if so, how. Section 2.1.2 shows the historical association of extreme poverty and severe levels of deprivation in the Northeast of Brazil. As a result, the focus of this thesis is in that region, with close to 80% of all municipalities analysed and all of the case studies in the Northeast of Brazil.

[52] Ribas and Machado (2007) have proposed a model for pseudo-panel data to analyse chronic poverty, based on the PNADs, but this model excludes rural areas because: (i) rural poverty is not comparable to urban poverty; (ii) lack of representative samples for rural households in PNAD; and (iii) "poverty in Brazil has become predominantly urban and metropolitan in recent years" (p.31).

As also justified in Chapter 2, my premise is that the persistently poor are predominantly those living in poor remote rural municipalities. Of course, not all the persistently poor live in remote rural municipalities, and neither are all remote rural municipalities mostly comprised of the persistently poor. However, I start my analysis with the spatial disadvantage realm for methodological purposes and without claims of causality, geographical determinism, or attempts to measure effect sizes. The first requirement, conducted in section 3.2, is to identify poor, rural and remote municipalities using a new typology. Section 3.3 explains the quantitative research design and introduces the datasets. Section 3.4 presents the qualitative research design and data. Section 3.5 outlines the analytical frameworks and brings together methods and research questions. This chapter has appendices, listed in section 3.6.

3.2 Creating typologies: Poor Isolated Rural (PIR) and Poor Non-Isolated Rural (PNIR) municipalities

3.2.1 Justification for the PIR and PNIR typology

The main reason I created the PIR and PNIR typology is to shed some light on areas of the poverty research that may be little emphasised or under-investigated in the prevailing literature, which mostly relies on the National Household Surveys (PNAD). PNADs present several limitations to studying chronic or persistent rural poverty: a lack of longitudinal information for the period analysed[53], a lack of information representative of small municipalities, a lack of geographical variables that may influence socio-economic aspects of standards of living, and the problematic definition of rural areas in Brazil.

The National Bureau of Statistics' (IBGE) definition of rural areas is problematic at several levels. First, urban areas are defined by municipal law and not by a national criterion such as population density, while rural areas are simply areas that are not urban. There are legal allowances for larger "villages" and "non-urbanised areas of a city" to be statistically counted as urban. This rural/urban definition confounds different types of location, providing an inaccurate picture.

[53] IBGE is designing the integrated system of household surveys (*Sistema Integrado de Pesquisas Domiciliares*), which aims to address the provision of socio-economic and demographic information to inform public policy, including longitudinal investigations.

Second, IBGE (2008b) classifies rural areas as:

(i) Rural agglomeration of urban extension: rural areas closely connected to urban areas by up to one kilometre;
(ii) Isolated rural agglomeration: rural areas with a distance greater than one kilometre from an urban area. This classification is subdivided according to the way the agglomeration is characterised (povoado, núcleo, lugarejos) according to the availability of services, local shops, churches and linkages with a major land owner;
(iii) Rural areas excluding rural agglomeration: rural areas on the outskirts of rural agglomerations.

IBGE takes into consideration services and distance when conceptualising *rural* and *remote* areas, but distance is the key concept that guides *remoteness*. Service availability, combined with linkages to a major landlord, is a secondary concept, used only to subdivide isolated rural agglomerations. Service availability is comprised of the existence of a local shop and two of the following services: school, health centre or a church.

This characterisation is too generic, and therefore it is insufficient for the specific research proposed, not to mention that it still carries the historical vestige of linkage with a landlord as a characterisation of the space. A kilometre is too a small measure to identify remoteness. For a country as the size of Brazil, this is a large underestimation. Furthermore, by ignoring the type of urban extension linked to a rural agglomeration, this classification fails to identify the role of the local administration in providing services. It also does not differentiate between the availability of several services as opposed to just a few.

Certainly, an isolated rural agglomeration with a school and a church, located more than 20 km away from the local town with difficult road access, cannot be compared with rural agglomerations with a number of schools and health centres sitting within 2 km of the local town accessibly by paved roads. Likewise, a rural agglomeration linked to the urban extension of a small municipality, cannot be compared to another type that is linked to an urban extension of a municipality of regional importance, even though the smaller one might have all the necessary services.

IBGE definition of 'rural' has the potential to gather information about very different types of rural areas. If rural studies are based on the PNADs, serious consideration must be given to PNAD sampling method. Research based on these conceptualisations should allow for its limitations, although these are often ignored.

The method proposed here attempts to address some of these gaps, by positioning municipalities in relation to their rural populations and urban connections, and by attempting to understand the heterogeneity of rural municipalities based on poverty and remoteness levels. Thus, I focus on a small group of municipalities which share similar characteristics of location, poverty and rural features. The focus on municipalities is also justified through the role they play in BF programme implementation.

However, some limitations are important to keep in mind. Although I continue to use IBGE's identification of rural and urban within municipality sub-divisions, I categorise municipalities as rural by the percentage of the population living there, a concept of 'rural' based on population density. I have excluded natural reserves or indigenous areas, as these areas require a different analytical approach. Geographical variables, such as low natural resources for small farming, are partially captured by rural and poverty variables.

Due to data limitations, I did not include municipal-level service provision variables[54]. Bird *et al*. (2010b) show that poverty in rural areas is more correlated with remoteness than with availability of facilities. High poverty levels in remote rural areas may be associated with lower levels of service provision. It is plausible to infer that remote places would have (i) lower access to public services, (ii) lower levels of specialised public services (which are mostly concentrated in urban areas), and (iii) more difficulty in accessing the already reduced level of service provision.

I was also unable to differentiate among urban municipalities. Different types of urban municipality (state capital, regional urban municipality or small municipality) may have different linkages and neighbourhood effects to nearby rural municipalities, but I believe ignoring this differentiation is not a major problem. Broadly speaking,

[54] While I was conducting fieldwork, IPEA released a research report (*Presença do Estado*) with service variables at municipal level. I was unable to include these variables for the proposed analysis, due to time constraints.

the closer a rural municipality is to a major urban municipality, the less likely the rural municipality will be defined as rural and poor. As a consequence, the dataset of this thesis is confined to small poor municipalities in northeast Brazil with on average less than 20,000 inhabitants. This follows the literature on extreme poverty in small municipalities of the Northeast (Osorio *et al.* 2011b).

There is a possibility that different groups of people within the same municipality may experience different service accessibility, depending on their income or mobility levels. This what has come to be known as the ecological fallacy (Commonwealth of Australia 2001 p.7), i.e. basing inferences about individuals solely on area-characteristics[55]. To avoid this, I combine geographical with socio-economic variables, as well as working with municipalities rather than households as the unit of quantitative analysis. I also select only those municipalities with the highest poverty headcount, and I construct the remoteness variable by considering only the distance between municipalities, disregarding costs. In that way, distance is the same independently of differences of income or transportation.

Lastly, it is important to situate the typology used in this thesis within the overarching rural development policy discussions in Brazil. The concept of "territory", together with demands for democratic participation, devolution and sustainability, led the Ministry of Agricultural Development to propose an approach to policies – the Rural Development Territory programme[56] – which considers multiple dimensions of the needs and inter-relations of the population within a territory (de Freitas *et al.* 2010). The idea that a group of municipalities can gather as a "rural territory" ("*territórios da cidadania*") and have a dialogue with state and federal levels is a powerful tool for regional development and bottom-up policy innovations.

Territory-level decisions are made by a Territory Collegiate that deliberates about the general needs of its municipalities. It is primarily a political decision-making process, and both government and civil society representatives participate. The

[55] These debates arose as a result of misleading usages of the Australian Bureau of Statistics' SEIFA indexes (Socio-Economic Index for Areas) as proxies for individual socio-economic status. It is important to note that the fallacy is not relevant for this thesis because, unlike my proposed typology, SEIFA does not have geographical or area-based variables such as remoteness, road quality, or infrastructure. Instead, it aggregates individual-level variables (percentage) related to occupation, income, education, assets, housing, *etc*. See: Australian Bureau of Statistics (2012,2013).
[56] *Programa Nacional de Desenvolvimento Sustentável de Territórios Rurais* (PRONAT).

methodology proposed in this thesis could be used as a tool to guide Collegiate analyses of poverty, remoteness, service provision and policy delivery.

3.2.2 Information on geographical datasets

There are two geographical datasets used to create the typology of municipalities: (i) the Map of Poverty and Inequality (MoPI), and (ii) the Digital Integrated Cartographic Base of Brazil at the Millionth Scale (BCIM, version 3.01).

IBGE and the World Bank produced the MoPI in 2003. Using the small area estimation method (Elbers *et al.* 2003) based on the 2000 Census and the 2002 household budget survey (*Pesquisa de Orçamentos Familiares*), the MoPI estimates poverty levels by municipality. Analysis of municipality-level data relies on small area estimation techniques because census data do not incorporate income measures, and household surveys, which do have income measures, are not representative of small areas. The MoPI is the only dataset that estimates poverty levels by municipality with the geographical information required for my proposed typology of municipalities.

As far as data quality is concerned, a relevant validation exercise was conducted by Demombynes *et al*. (2007). They compared estimations of poverty and inequality rates in Mexican rural communities with their true value. The authors found that, if location effects are not well captured in the underlying consumption models, the precision of the estimates is reduced, resulting in larger standard errors. Bias could result either in an overestimation of poverty in non-poor communities or in an underestimation of poverty in poor communities (2007 p.17). Thus, it is important to keep in mind that, if location variables are not properly identified in the Brazilian case, there is a possibility of bias by underestimating poverty levels. The poorest municipalities chosen could be, in reality, even poorer.

The second database, the 2009 Continuous Cartographic Base to the Millionth Scale (BCIM, version 3.01)[57], provides an update of the MoPI transport network (roads, bridges, ports and rivers). The original BCIM was produced in 2003, as part of the

[57] BCIM uses the same datum as the MoPI, the 1969 South American Datum – SAD1969.

United Nations' Global Mapping project – an initiative of more than 120 countries to obtain sets of maps using the same scale (IBGE 2003).

The BCIM relied on information for Brazil from the National River Transport Agency, the National Civil Aviation Agency, the National Land Transport Agency, and the Ministry of Transport (IBGE 2009b). In terms of data quality, IBGE uses information on Global Positioning System, remote sensing, satellite images and larger scale maps to update the BCIM (IBGE & MPOG 2010). I use the BCIM data as they were generated, without any changes in the scale (p.6).

3.2.3 Identifying poor and rural municipalities

Poor municipalities

The MoPI classifies poverty according to the Foster-Greer-Thorbecke (FGT) index (Foster *et al.* 1984)[58]. This index gives the proportion of the population whose per capita household consumption is equal to or below an assigned poverty line. There are 20 poverty lines, including one poverty line specific to rural northeast Brazil, which is important for this research[59].

FGT varies from 0 to 1, the closer to 0 the less poor the population is. The MoPI divides this variable into six categories. I have arranged the six categories into three groups: low, medium and high poverty, I chose the latter group, i.e. the group with FGT above or equal to 0.57. I used the geographic information system software ArcGIS to identify municipalities with high FGT poverty levels. I will discuss the sub-categories of the high poverty level groups in Chapter 4.

[58] FGT $\alpha=0$

[59] For details on the poverty lines, refer to the appendices to this chapter.

Table 4: Categories of the poverty variable

MoPI	FGT	Thesis category
1. Low poverty (lower bound)	0.05 – 0.15	Low poverty
2. Low poverty (upper bound)	0.16 – 0.29	
3. Medium poverty (lower bound)	0.30 – 0.42	Medium poverty
4. Medium poverty (upper bound)	0.43 -0.56	
5 High poverty (lower bound)	0.57-0.70	High poverty
6 High poverty (upper bound)	0.71 – 0.84	

Source: author's categorisation based on MoPI.

Two important considerations must be noted. First, I analyse the BF programme using a different poverty dataset from the one the programme itself uses, i.e. the official statistics, which are mostly based on the PNAD and on income. The MoPI, in contrast, uses information on consumption.

I understand that different poverty measurements yield different poverty results, and so I will not calculate point estimates or targeting measures. I will, instead, investigate trends in the programme participation rates across the years. I will also investigate, in Chapter 4, potential problems on the use of PNAD to determine poverty lines for small municipalities.

Second, the quantitative analysis uses consumption as a proxy for poverty, and consumption plus remoteness as proxies for long-term, persistent poverty. However, as the literature suggests, chronic poverty is longitudinal and multidimensional, and I am unable to capture these aspects quantitatively. Still, there is a significant literature discussing the long-term severe poverty that the rural poor in the remote Northeast face. I also broaden the poverty definition by incorporating qualitative methods as a complementary approach to the quantitative research strategy.

Rural municipalities

Taking into consideration issues of standardisation, I utilised the MoPI classification of rural and urban municipalities. MoPI employs the urbanisation index to decide

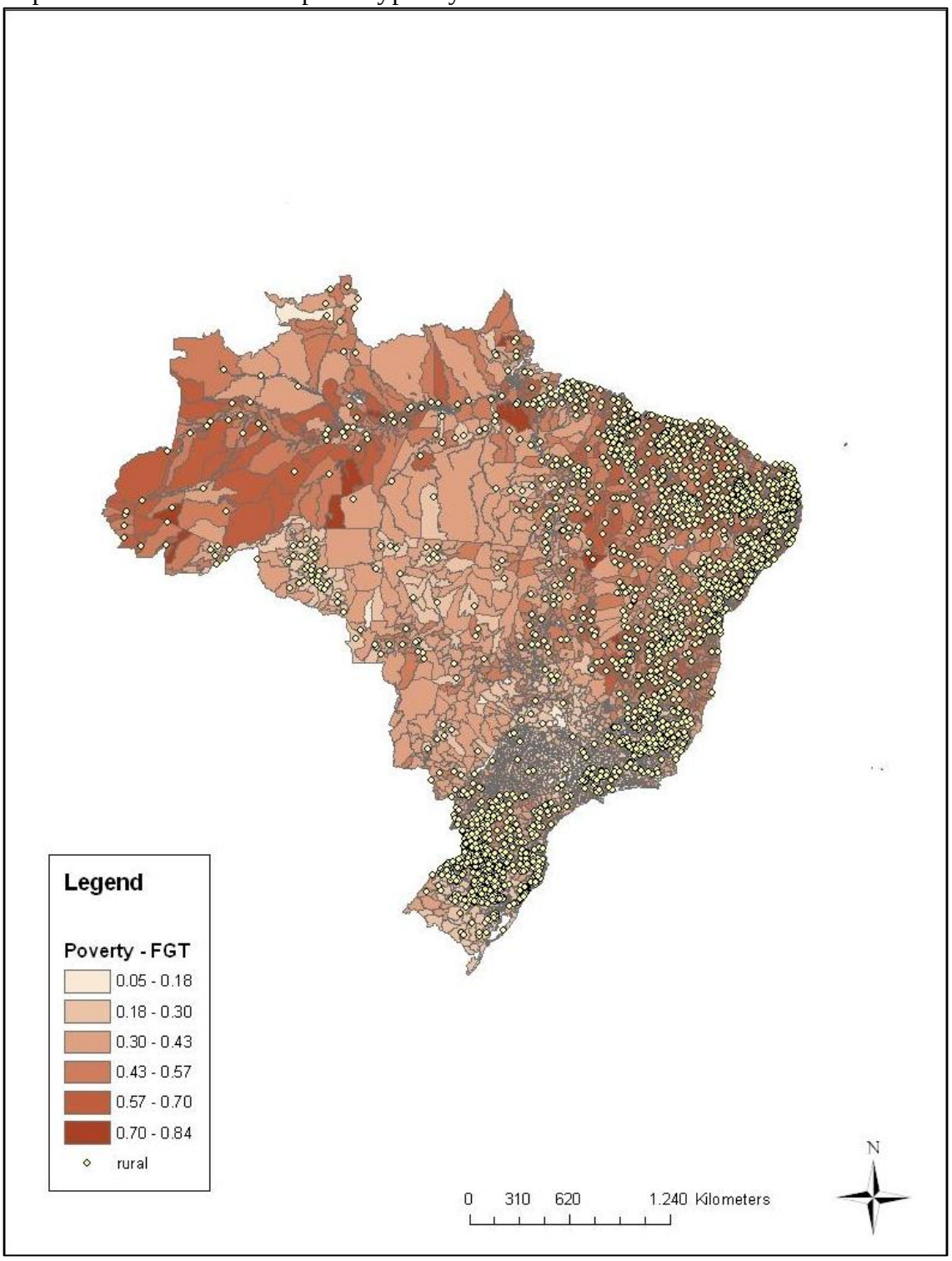
whether a municipality is urban, i.e. the percentage of inhabitants in urban areas over the total population in a municipality. A municipality is urban if the percentage of population living in urban areas is above 80%; it is rural, if the percentage is below 50%; and it is transition if the percentage is between 50-80%. Using a conservative approach, I only used municipalities defined as rural in this study.

There are 5506 municipalities classified in the MoPI urbanisation index[60]. Out of these, 2093 were rural and were 3413 urban (being 1786 transition areas). If I add the poverty cut-off described in the previous section, out of the total 2093 rural municipalities, 397 are simultaneously poor and rural.

Map 1 shows the first layer of poverty levels by municipality (shaded areas), with an additional layer shown by the location of the rural city centre or town hall (yellow points). Map 2 isolates only the poor rural municipalities, the sub-group of interest to this research. This map resonates with the rural poverty literature, in that it shows a difference between the rural poor North and Northeast on the one hand, and the rural rich South on the other (IFAD 2011; World Bank 2003).

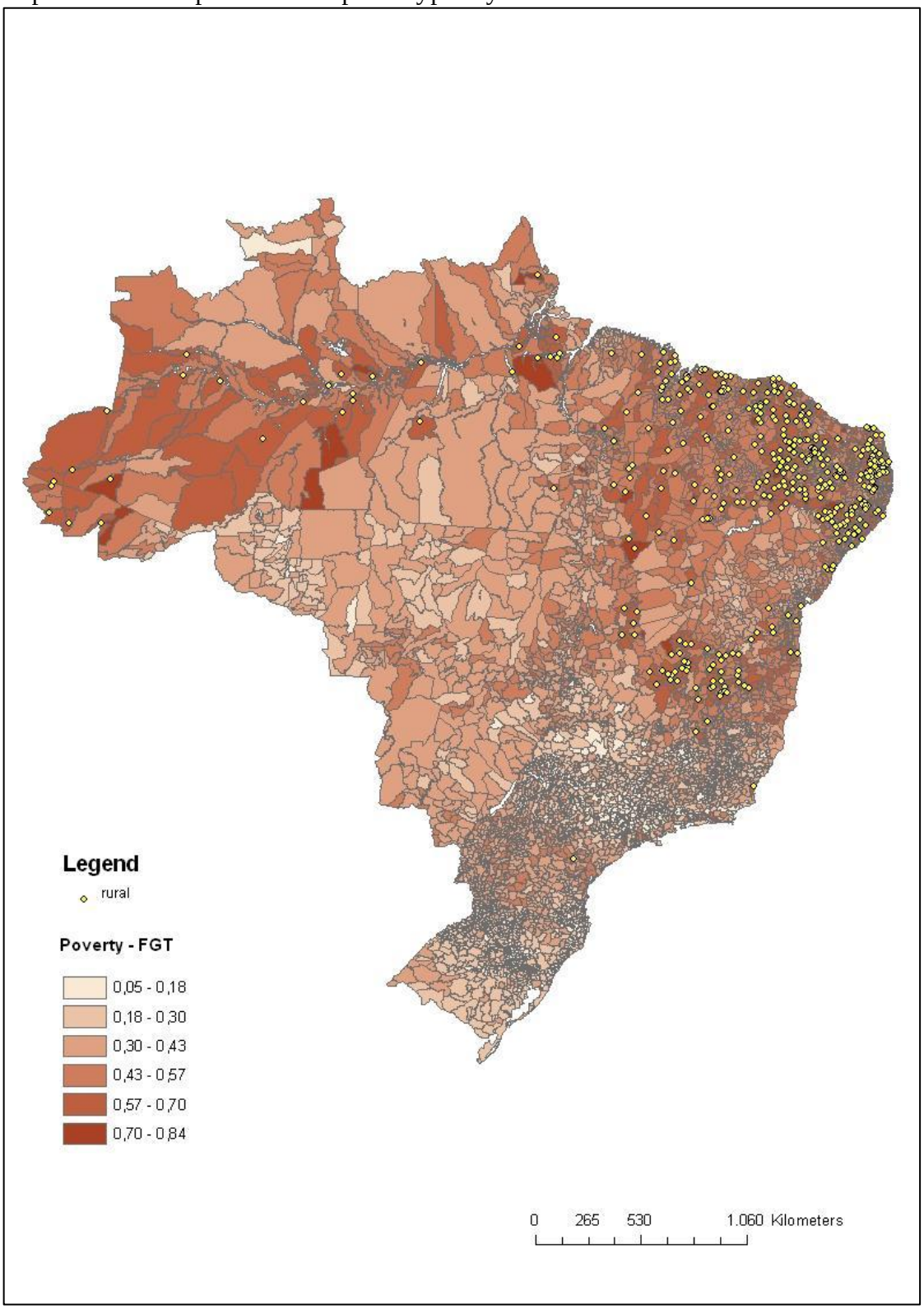
[60] I imputed the classification of 23 national and state capitals as urban municipalities.

Map 1: Distribution of rural municipalities by poverty levels in Brazil



Source: author based on MoPI.

Map 2: Distribution of poor rural municipalities by poverty levels in Brazil



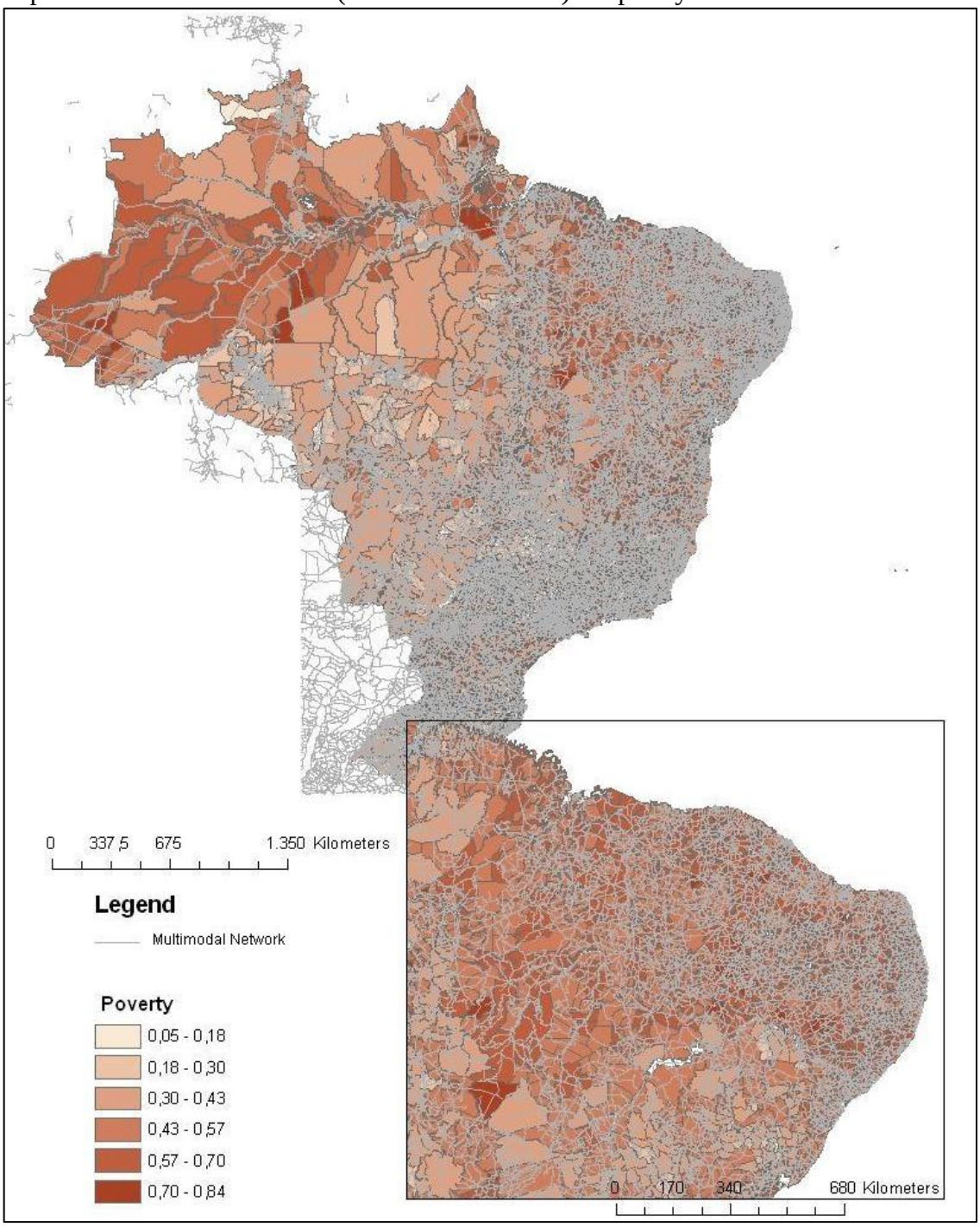
Source: author based on MoPI.

3.2.4 Constructing the remoteness variable

After identifying the poor municipalities that are also predominantly rural, I proceed with the inclusion of the BCIM dataset. I do not calculate the distance between point A and B in a straight line to estimate remoteness. Instead I refine this calculation by using the transport network (BCIM) and conduct a multimodal network analysis[61]. Map 3 shows the poverty levels (shaded areas) with the transportation network layer from the BCIM (grey lines). Map 4 adds two layers: the urban municipality layer (black points) and another one with poor rural municipalities (yellow points). Each of the following maps has an inset showing the municipalities of interest to this thesis, i.e. those located in the rural Northeast.

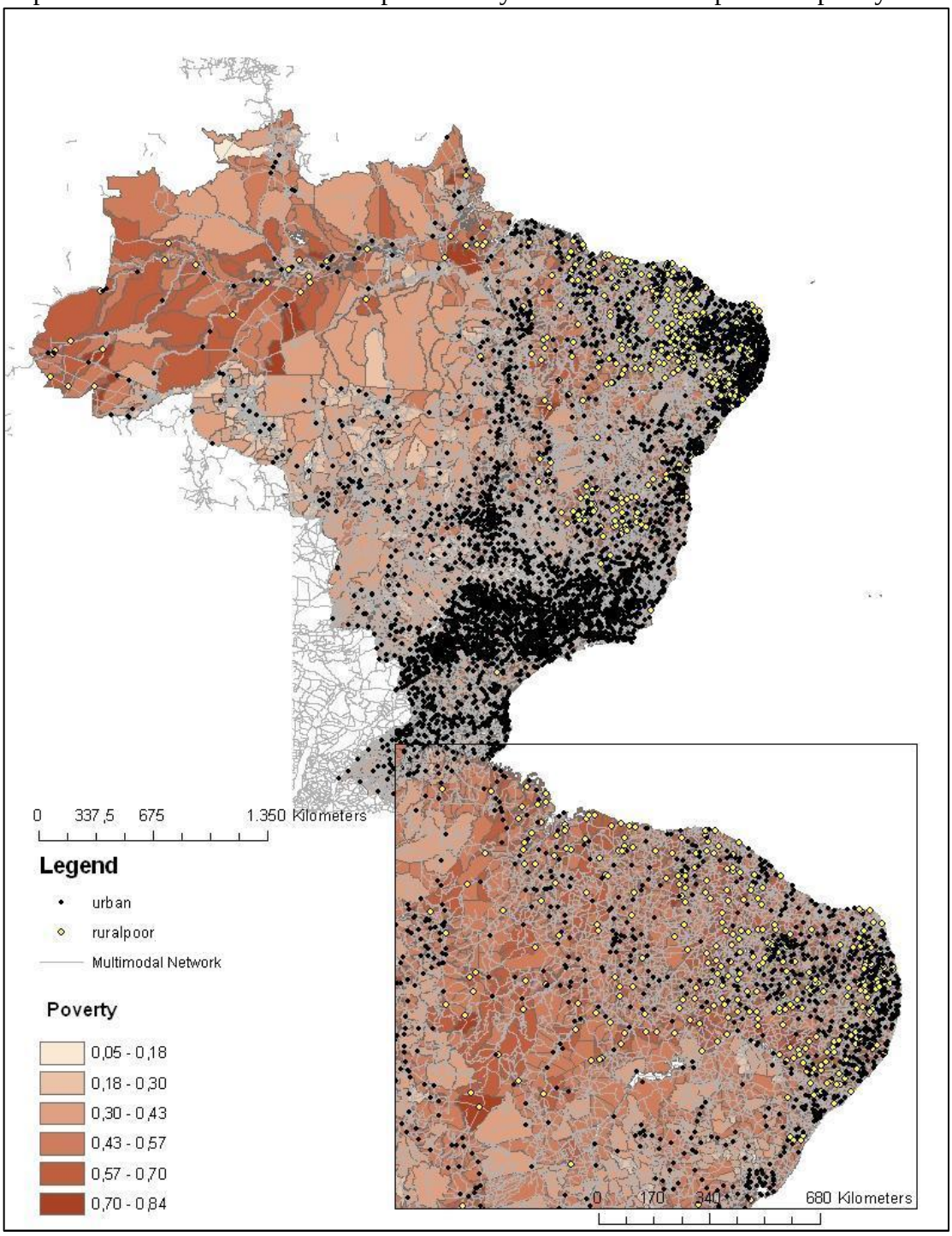
[61] Details of how I built the multimodal network dataset, including data clean-up and the feature dataset, are in the appendices to this chapter.

Map 3: Multimodal Network Dataset (roads and rivers network) with poverty levels



Source: author based on MoPI and BCIM.

Map 4: Multimodal Network Dataset with predominantly rural and urban municipalities and poverty levels



Source: author based on MoPI and BICM.

The Network Analysis

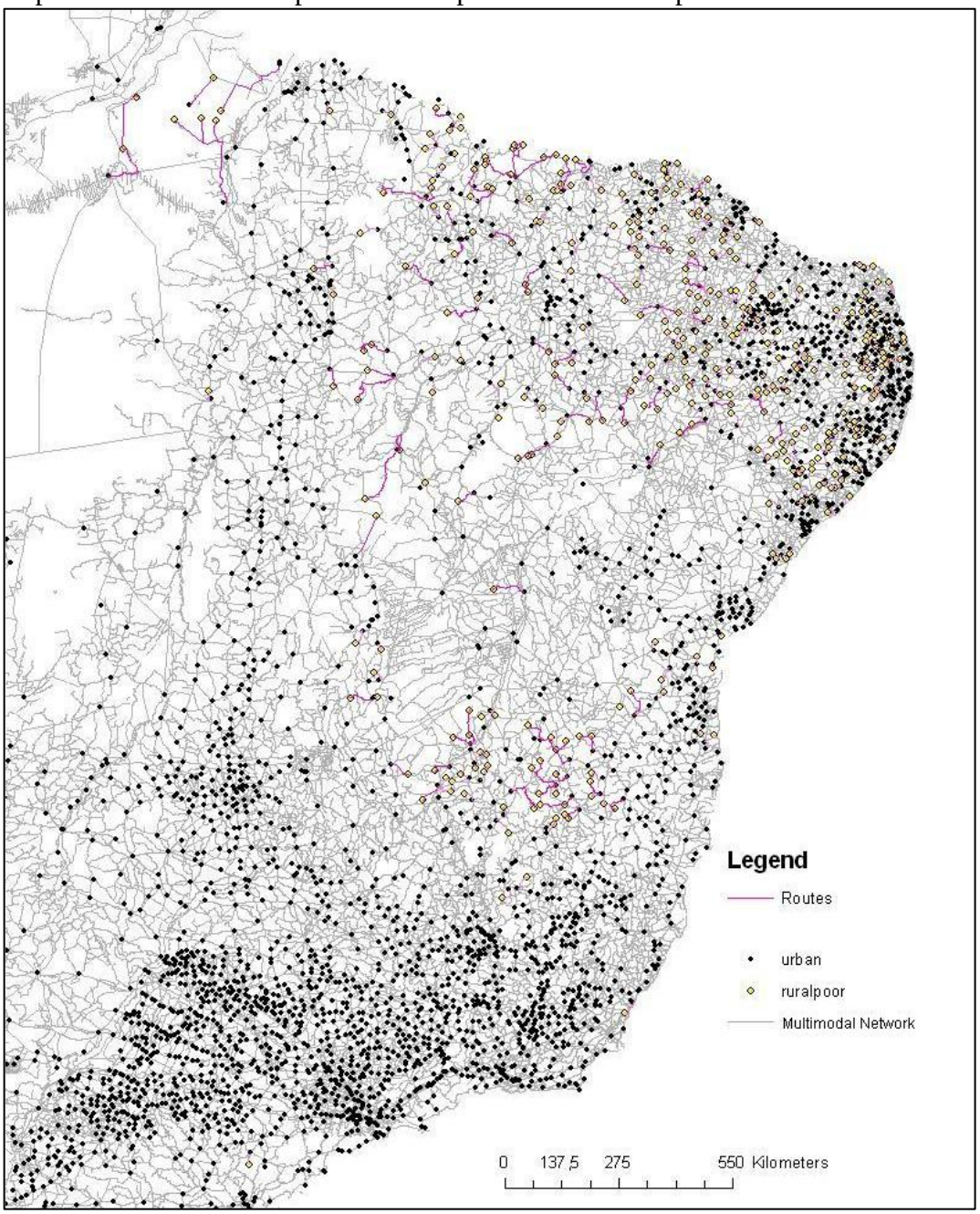
I conducted the network analysis based on Map 4. The analysis takes into consideration a pre-set delimited path in order to find a combination of alternative routes between two places of interest. The two points of interest are (i) poor rural municipalities, and (ii) urban municipalities.

I identified the closest urban municipality to a poor rural municipality, following the transport network and a hierarchy of preferences I assigned (function closest facility). Paved roads were preferred over roads in the process of being paved, which are, in turn, preferred to unpaved roads. Unpaved roads, roads without paving information and rivers have the same preference level. In that way, the software followed the hierarchy of preferences when there is a choice between different roads and river networks[62]. The software returned the distance in kilometres between these two points[63].

Map 5 shows the network analysis. The yellow points represent the local town hall of a poor rural municipality and the black points the local town hall of an urban municipality. The pink lines are roads and/or rivers linking these two points, and the grey lines are other existing networks. I double-checked the output with information from the Brazilian Association of Highway by randomly selecting a sample of distances[64]. The difference was considered acceptable, within a radius of five kilometres.

[62] For details on the network analysis, please refer to the appendix.
[63] 22 out of 3413 urban areas had network connections higher than 5 km. I disregarded these municipalities, which represent 0.64% of urban areas.
[64] http://www.abcr.org.br/geode/ accessed 20/02/2010.

Map 5: Shortest route between poor rural municipalities to urban municipalities

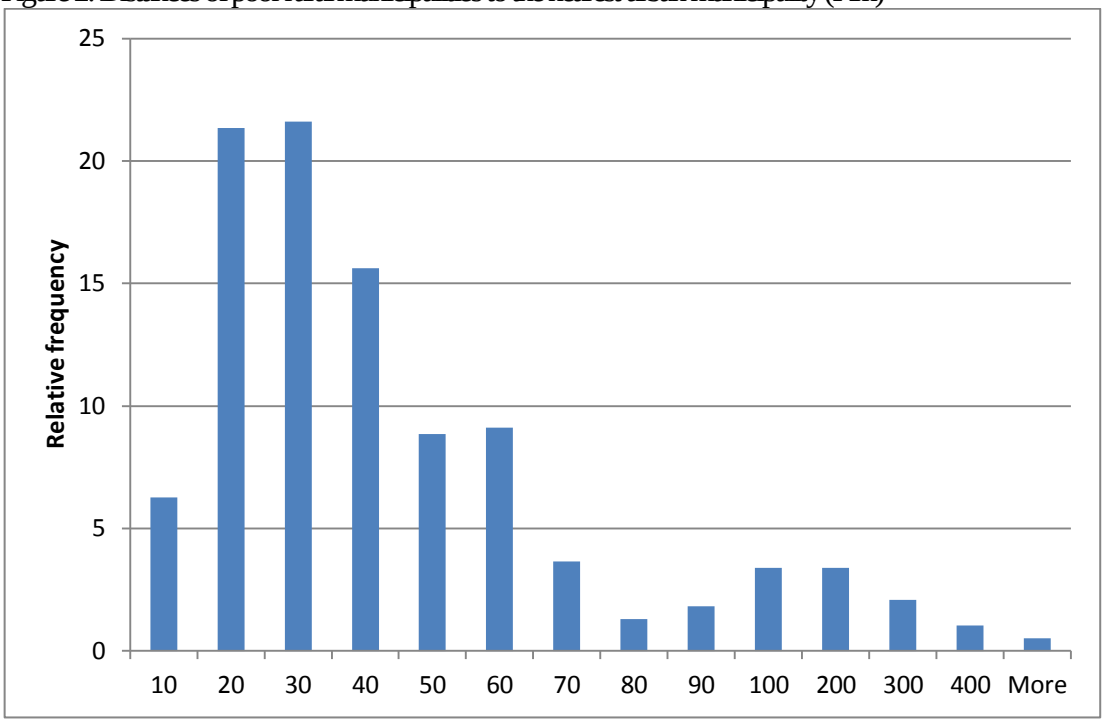


Source: author based on MoPI and BCIM.

3.2.5 The PIR and PNIR typology

The network analysis shows the distance in kilometres between the two points of interest, illustrated in Figure 2.

Figure 2: Distances of poor rural municipalities to the nearest urban municipality (Km)



Source: author's calculations based on MoPI and BCIM.

The distribution is skewed to the right with distances representing more than 400 kilometres to the nearest urban centre. The average of the distribution is 47 km, and I use the cut-off point of 50 km. Poor rural municipalities were considered isolated if the distance was equal to or above 50 km – **PIR (Poor Isolated Rural)**; they were considered non-isolated if the distance was below 50 km – **PNIR (Poor Non-isolated Rural)**[65].

Of the 397 poor rural areas, 101 are classified as PIR, 283 as PNIR and 13 were not identified by ArcGIS, representing 3.27%. Six of those unidentified rural municipalities had no road or river within a 5 km radius. Seven of them had no urban municipality nearby[66].

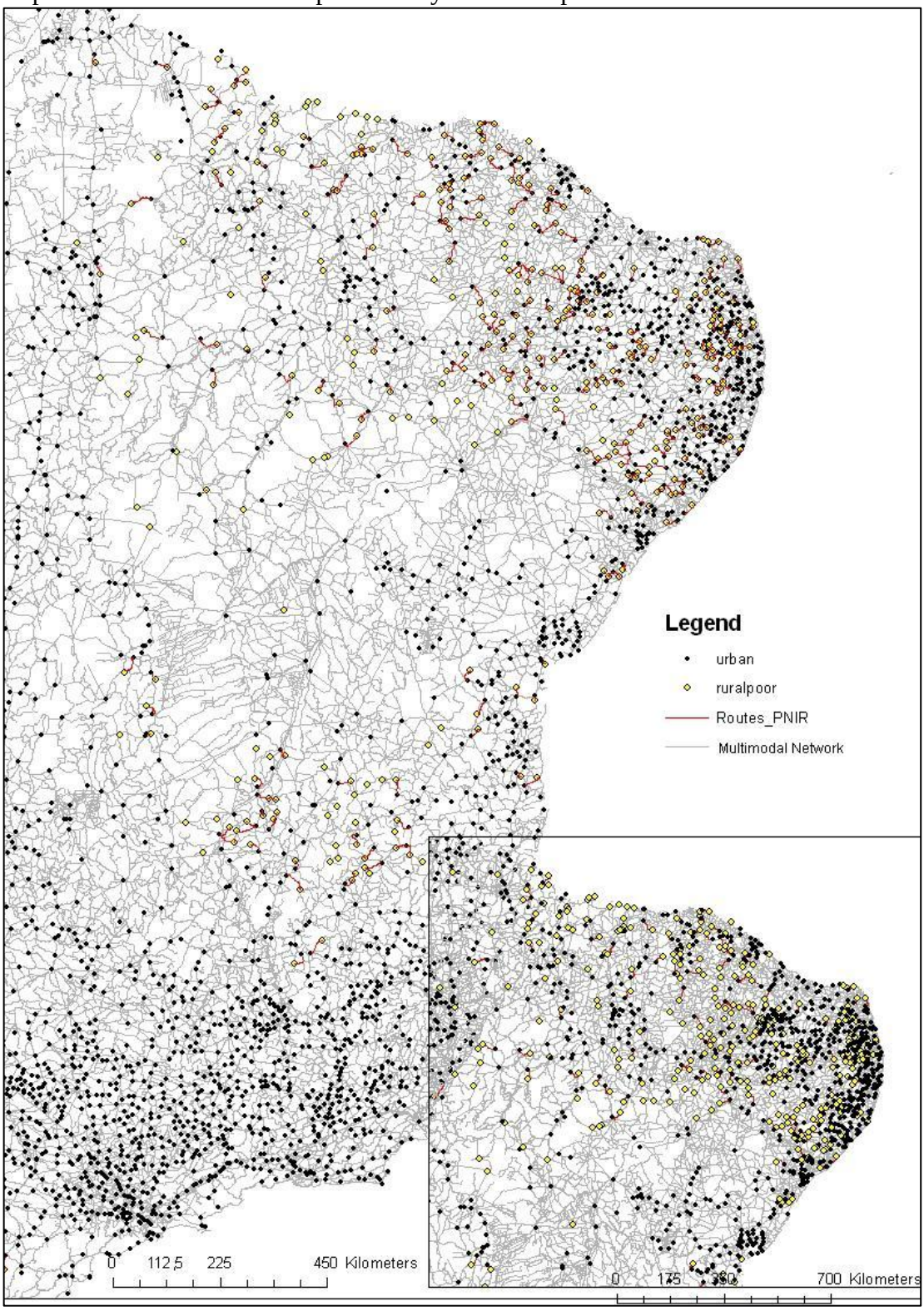
[65] I used ArcGIS → select by attribute\"Total_Km">=50 or "Total_Km"<50

[66] Some possible explanations for the six unlocated poor rural areas might be (i) that there is indeed no road close by and it is a very isolated, (ii) that there is a road but it was created after 2009, or (iii) that there are problems with the coordinate reference system. The seven located poor rural areas with

Map 6 and Map 7 illustrate the resulting network analysis for PIR and PNIR municipalities. A comparison of the maps illustrates the multimodal network analysis based on the distances of poor isolated and non-isolated rural municipalities from the nearest urban municipality.

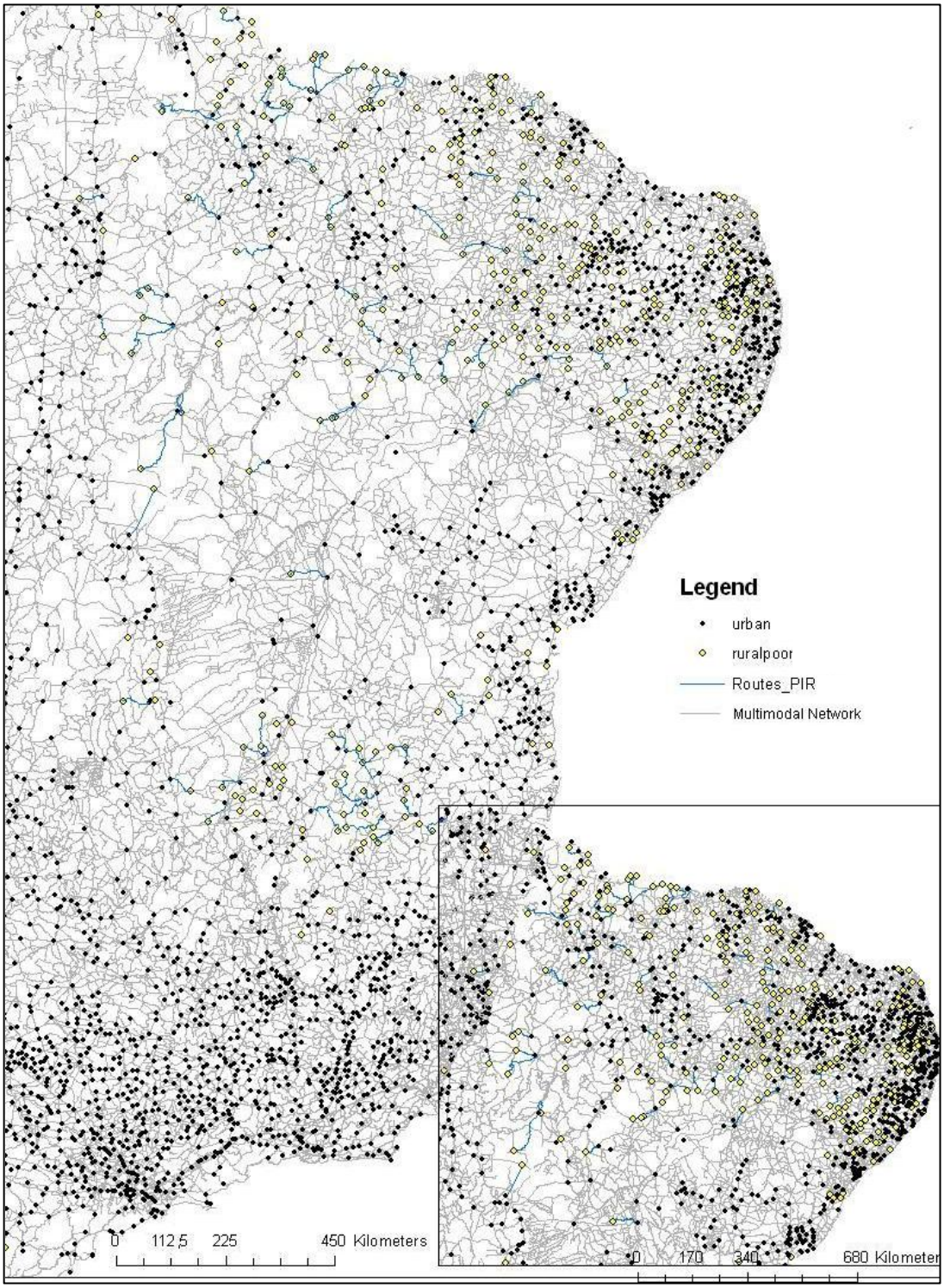
unlocated urban areas could be among 22 unlocated urban areas that were previously dropped. See foodnote 63.

Map 6: Shortest route from PNIR to predominantly urban municipalities



Source: author based on MoPI and BCIM.

Map 7: Shortest route from PIR to predominantly urban municipalities



Source: author based on MoPI and BCIM.

3.3 Quantitative research design: datasets and data quality

Research question one (RQ1) asks how effectively the BF programme reaches PIR and PNIR municipalities, by looking at participation rates derived from *Cadastro* and IBGE population estimates. Research question two (RQ2c) investigates the compliance with the BF conditionalities, using datasets from the Ministries of Health and Education.

3.3.1 Introducing the datasets

Research question one (RQ1)

Cadastro is an administrative database created in 2001 (*Decreto* No.3877, 24/07/2001). In Brazil, incomes are calculated per month, either aggregated by households or calculated as an average of household income *per capita*. *Cadastro* only registers households with (i) incomes per household up to three times the minimum wage, or (ii) incomes *per capita* of less than half of the minimum wage. MDS uses the *Cadastro* to determine household eligibility to social assistance programmes, including the BF.

I contacted MDS in July 2010 and requested a snapshot of the *Cadastro*. This snapshot is a cross-sectional database with the numbers of BF beneficiaries by households in each municipality in July and December from 2004 to 2009. I merged the information from MoPI and BCIM with the *Cadastro*, based on the seven-digit unique municipality code, using ArcGIS and Excel 2007[67].

In order to calculate participation rates (RQ1), I added information on the total population of each municipality using STATA10, as this required more advanced computations. IBGE estimates the yearly municipality population by numbers of inhabitants based on PNADs. I used this information for the years 2004, 2005, 2006, 2008 and 2009. In 2007, IBGE conducted a population count (*Contagem populacional*). Once again, these datasets were merged using the unique municipality code.

[67] I was careful to merge the files by creating a new variable in STATA to indicate different levels of merging outputs, which I inspected after each merge.

However, the IBGE population information is not comparable with the *Cadastro*, as the unit of the former is inhabitants and the latter is households. In order to obtain the number of households per municipality, I constructed another variable using the average number of persons in a household per year. IBGE publishes this information by state.

It is important to mention that using the state average could bias the number of households in a municipality. It may give an over-estimation for larger municipalities and an under-estimation for smaller municipalities (Marques 2005 p.14). This produces an over-estimation of participation rates in PIR and PNIR municipalities, addressed in the next sub-section.

Research question two (RQ2c)

I visited the Ministry of Education (MEC) and the Ministry of Health (MS) during my fieldwork in 2010 to request information on their compliance levels by municipalities. The MS dataset (*Datasus/Sisvan*) has information from beneficiaries at two points in time, June and December. I was able to obtain spreadsheets from December 2005 to June 2010. This dataset had the unique municipality code, which I used to merge it with the master data.

MEC's dataset (*Presença*) is registered bi-monthly. It has the reasons for low school attendance by municipality. Each school registers school attendance per student bi-monthly. If a student has attendance below the required level, a field opens up for including the reason. Although I obtained all reports from 2007 to 2010, I decided to use only information in June of each year. In order to merge this data with the master data, I had to do several computations to derive the municipality code using Excel and STATA, detailed in the appendix.

3.3.2 Data quality

I was careful to merge datasets produced in the same month of a calendar year as much as possible. IBGE produces its population estimates in July. I specifically requested MDS for snapshots of the *Cadastro* in July. MEC and MS datasets have information in June each year.

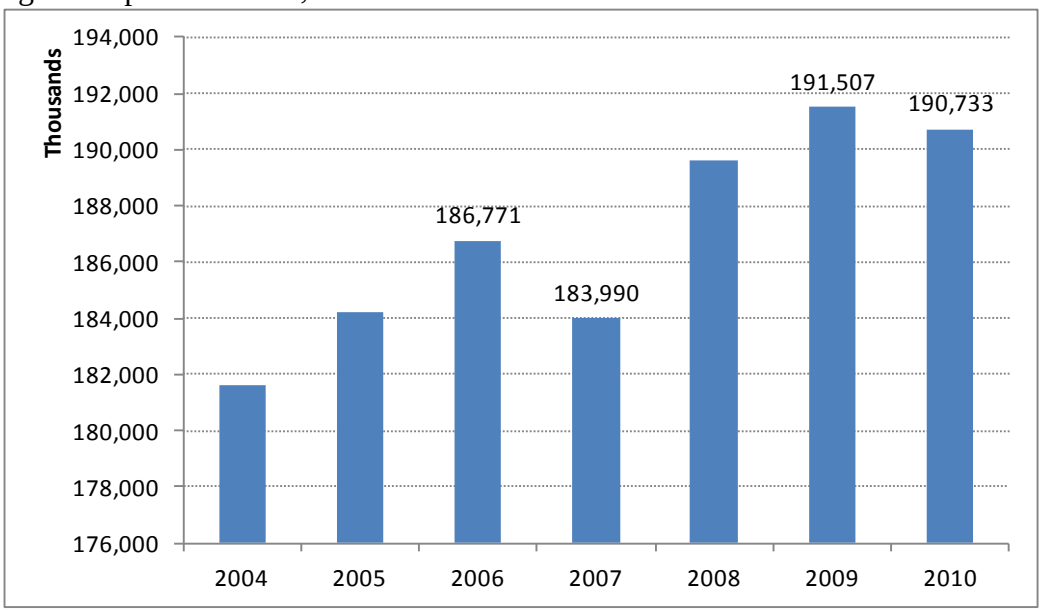
Although there are problems with using administrative datasets, it is important to recognise that *Cadastro* is the dataset utilised by the MDS to register and select the beneficiaries. MDS has put in place several quality controls for *Cadastro* (further analysed in Chapter 5). IBGE population statistics are used by the government to transfer funds to the municipalities. MEC and MS datasets are used to cancel BF benefits. Thus, there is a strong incentive for ensuring the quality of those administrative datasets.

There are advantages and disadvantages to using administrative datasets. The advantages are the cost-effectiveness of using census-like data, as opposed to running a sample survey. The information in federal-based datasets is also consistently captured, as ministries have national directives prescribing how and when to input the information in the systems.

The disadvantages in the use of administrative datasets are largely problems of data entry. Inputs into these systems are made at the municipal level. There may be inconsistency in coding between different technicians. There could be registration errors, system errors and even fraud. There is some qualitative evidence of under-reporting cases of non-compliance in schools (Bastagli 2008; Rocha 2013). There is also the problem of a potential mismatch between definitions of administrative datasets and those used by researchers. Such differences are found in the MEC dataset, further detailed in Chapter 8.

As for the population statistics, it is important to keep in mind its limitations, as illustrated in Figure 3.

Figure 3: Population of Brazil, 2004-2010



Source: PNADs (2004, 2005, 2006, 2008, 2009), *Contagem Populacional* (2007), Census (2010).

The drop in population estimates in 2007 is due to the different methodology used in the population count. This resulted in lower constitutional federal transfers[68] to municipalities for the provision of social services. Municipalities filed several lawsuits requesting that these numbers be corrected and adjusted (Watanabe 2008). The Brazilian Court of Audit (TCU) was requested to audit IBGE's methodology, specifically for estimating the population and the municipal gross domestic product (TCU 2009a). TCU found that IBGE's methodology in general was satisfactory for population estimates, although unsatisfactory for cases with high migration flows[69]. This process resulted in several recommendations, which IBGE included in the 2010 Census – the basis for the 2011 municipal estimations (IBGE 2011a).

The possibility of error in estimates of participation rates in individual municipalities, led me to adopt three strategies to answer RQ1: (i) to compare participation rate trends instead of point estimates; (ii) to report participation rates by PIR and PNIR typologies, instead of individual municipalities, and (iii) to compare the participation rates by categorical poverty variables. This is the core of the analysis in Chapter 4.

[68] This transfer is called FPM (*Fundo de Participação dos Municípios*).

[69] This methodological problem is relevant to this thesis. Municipalities resort to information that may produce uncertain statistics, e.g. difference between the number of births and deaths. However, IBGE estimates disregard the flows of people across municipalities, and this has an impact on local administration. As this thesis will show, populations in PNIR municipalities migrate to the nearby urban municipality to use its public services, while still residing in the rural municipality where they are counted for IBGE's purposes. This is not addressed in the population count that is the basis for federal transfer towards local service provision.

Another important issue to be outlined is the comparability of datasets. I use the MoPI and BCIM to construct the remoteness variable and the typology of remoteness is unlikely to have changed over time. I do not make comparisons between different administrative datasets. Instead, I compare *Cadastro* participation rates and compliance rates against the typology. Although I have snapshots of health and education compliances in periods of time that are similar, I do not compare health and educational datasets[70]. All administrative datasets have municipality as the unit of analysis. I see, therefore, no major issue of comparability.

It is important to address briefly the treatment of missing values and outliers[71]. A variable was considered to be missing (".") when there was no municipality code assigned to it in the MoPI merging file[72]. Another type of missing variable consists of values such as *0* or *99*. Using the extended classification of missing variables in STATA 10, the first instance is referred to ".z" and the second as ".a"[73].

Exploratory data analysis demonstrated some potential problems with outliers from 2004 to 2006[74]. *Cadastro* quality for the first years of programme implementation is questionable, and IBGE population estimates have been contested. *Cadastro* was not initially intended to be used for the BF, and some adaptation was required during the first phases of the BF. The BF was based on previous programmes, bringing overlapping information into a single dataset. Most importantly, the *Cadastro* was not constantly updated, and compliance with conditionalities was not thoroughly investigated, in the beginning of the programme (Soares *et al.* 2009 p.9). This was confirmed during the fieldwork for this project. Furthermore, TCU (2009a) has reported that IBGE population estimates are particularly problematic for

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[70] Although the analysis of a combined education and health dataset is not attempted in this paper for methodological reasons, the interaction could yield interesting results.
[71] For more information on data management, description of variables and the exploratory data analysis of missing variables and outliers, please see appendices.
[72] Variables are missing because 58 new municipalities were created during these ten years. The MoPI had, in total, 5507 municipalities, while the *Cadastro* dataset had 5565.
[73] In 2004, for example, 92 municipalities had missing values for BF participation rates, and 16 had missing values in 2005. Although I was not able to use them for 2004 and 2005, I keep them in the dataset, as it is only to be expected that the BF would not have reached all the municipalities in Brazil at the beginning of its implementation.
[74] Outliers have been defined as "extreme values for a particular variable" (2007 p.45). Although the definition of 'extreme values' varies, I define outliers using quartiles with a multiplier for the inter-quartile ranges (IQR). I divide outliers into two categories: potential outliers are observations that lie at 1.5 IQR, and problematic outliers are those at 3.0 IQR. See Agresti and Finlay (2009) and High (2000).

municipalities with high migration flows, such as the small rural municipalities analysed.

Thus, I decided to address the issue of outliers with yet another measure aside from group analysis. Instead of excluding the outliers, I winsorised the dataset by setting a limit to the top and the bottom percentiles of the distribution. This transforms only the value of the outliers and not of the whole distribution (Tukey 1962). I arbitrarily chose to set the top limit as the 97^{th} percentile and the bottom limit as the 3^{rd} percentile.

The rationale for group analysis, like that of the outliers, followed quartiles distribution. I clustered the municipalities according to their position in the quartiles, avoiding any conclusion about a particular municipality by comparing group trends across years.

Lastly, this thesis does not make claims about causality. There are several alternative explanations for any connections between remoteness and either participation rates or conditionalities. For example, it is plausible to consider that households avoid living in remote areas because of the difficulty in accessing educational and health services. Thus, remoteness influences the migration of households which in turn influences compliance in the geographical area. In this case, household characteristics are spatially correlated, but not-observed in the analysis. There may be other factors not captured by spatial variables that are related to the heterogeneity of different regions or municipalities, such as regional and municipal differences in funding, municipality staff numbers, and so forth. However, a spatial regression model that includes household, municipal and spatial characteristics is beyond the scope of this thesis. Nonetheless, through the qualitative analysis it may shed light on some of the possible alternative explanatory variables necessary to conduct a spatial regression.

3.4 Qualitative research design

The qualitative research design involves the collection of three qualitative datasets to understand the effectiveness of the policy take-up and implementation from the federal, local and household levels. The investigation of the effectiveness of the BF in reaching the rural poor in PIR- and PNIR-specific contexts requires the research

design of local and household levels to be structured around geographical location. This concern guides the selection of the case studies, the design of the samples, and the data collection.

3.4.1 Selection of case studies

Since this thesis aims to derive implications for public policies, my objective is to select typical case studies, or a representative type of rural municipalities, distancing myself from best or worst case studies (Seawright & Gerring 2008). In order to identify the types of rural municipalities that have the most occurrences, I used the MoPI to obtain information about the central tendencies of the variables important for the BF and this research. Thus, I selected case studies for each typology that were in the central range for income, education, health, poverty and remoteness[75].

Qualitative studies generally have a low variability of observations and small sample sizes. Some mixed-methods researchers propose, as best practice, larger sample sizes (Baharona & Levy 2007). Therefore, I have tried to address the issue of low variability by selecting four case studies, two cases representing PIR and two representing PNIR municipalities. The use of four case studies may reduce the chance that the findings are a result of a specific situation found in only one municipality.

In selecting the case studies, I excluded indigenous and *Quilombola*[76] peoples. MDS reports that the indigenous population was estimated around 2 million (MDS 2007b p.11). *Quilombolas* are the descendents of escaped or freed slaves, with historical traditional ties to the land called *quilombo* (Art. 2 *Decreto* No.4.887, 20/11/2003). There are about 3,524 *quilombolas*. In 2008, the BF reached approximately 19 thousand *quilombola* families (Presidência da República 2009).

Both peoples have priority in the selection process into the BF programme, as they have higher social vulnerability (Arts. 7,8 *Portaria GM/MDS No.341*,07/10/2008). Thus, their case study would produce different results from the analysis of rural

[75] I did not use the average BF participation as a selection variable, as it assumes that the BF is implemented everywhere and that the average distribution of the programme in the population will correspond to the average needs of the population. This may not be the case. See the Appendix 3F for details.

[76] *Comunidades Remanescentes de Quilombos.*

people in general. In addition, these people require anthropological considerations, which are not part of the objective of this research. The MoPI has information on indigenous peoples' sites but no information on *quilombolas*'. For the latter, I investigated whether there were any *quilombolas* nearby once the case studies had been selected.

As illustrated in Map 2, the majority of the poor rural areas were located in the Northeast and North of Brazil but, as stated in section 3.1, this thesis focuses on the Northeast. The probability of having a case study in the Northeast was higher than in the North due to the higher numbers of BF beneficiaries in the Northeast. There are also higher numbers of indigenous peoples in the North.

I intentionally selected case studies located in different states so that I could add variation to the interviews and to the local implementation processes. Three of the four cases were in the semi-arid (*sertão*) region of the Northeast.

Table 5 summarises the selection criteria and provides information on the case studies. I have refined the distance variable in order to select case studies that approximate to the median of the distance distribution. This aims to avoid case studies that are close to the cut-off point for PIR and PNIR municipalities, i.e. 50 km. Thus, by using the median as a rough guide, I selected case studies that are in the mid of the distribution.

Table 5: Selection of case studies, PIR and PNIR

	PIR criteria			**PNIR criteria**		
Case study #		***i***	***ii***		***n***	***nn***
Distance to nearest urban municipality	**>50 km** ***(Median 72 km)***	91	69	**<50 km** ***(Median 25 km)***	23	24
Distance to the state capital		740	779		284	210
Median income	**R$151 - 302** (US$65-131)[(1)]	R$270 (US$117)	R$161 (US$70)	**R$151 - 302** (US$65-130)	210 (US$91)	210 (US$91)
Education: age/grade gap	**61-75%**	69	72	**61-75%**	63	64
Education: Multi-grade classrooms	**26-50**	49	38	**0-10**	*12*	*13*
Education: Literacy rates	**61-70%**	66	61	**61-70%**	65	70
Education: %pop with less4yof study	**61-80%**	*60*	70	**41-60%**	57	57
Education: average years of study	**2.1 -4**	2.92	2.17	**2.1 -4**	3.09	2.94
Health: #beds/1,000 pop	**0 - 0.5**	1.7	0	**0 - 0.5**	1.5	*0*
Health: #medical positions/1,000 pop	**0 - 0.5**	0	0	**0 - 0.5**	0	0

(1)Values as of 02/01/2002.

Source: author's calculations using MoPI and BCIM.

PIR case studies "i" and "ii" have similar distances from state capital, i.e. 740 km and 779 km respectively. PNIR case studies "n" and "nn" follow the same pattern, i.e. 280 km and 210 km from the state capital. This result was unintentional, but it validated the methods utilised to construct the remoteness variable. The same effect was observed in the distances to sub-regional urban centres. PIR municipalities are further from sub-regional centres than PNIR municipalities. This is important

because those sub-regional centres are reference points for public services like hospitals, specialised medical treatment and tertiary educational services.

Another important geographical characterisation of PIR and PNIR municipalities was the structure of the roads surrounding these locations. The PIR case studies had no major state highway cutting across them, but rather a side-road paved or recently paved leading to the rural municipality. The selected PNIR municipalities, on the other hand, had a major highway linking them with neighbouring municipalities. Furthermore, PIR municipalities had neighbouring rural municipalities located further away than PNIR municipalities. This is further explored in Chapter 7.

General information on case studies

PNIR case study "n"

This was the largest municipality visited, with a population of over 30,000 inhabitants. It is located in the semi-arid Northeast. The typical vegetation is *caatinga* (scrubland). Part of the municipality is located in the mountain range with a type of tropical forest vegetation, with palm trees such as the *carnaúba* and *babaçu*. The soil is mostly sandy and rocky.

The region produces greens and other vegetables such as lettuce, onions, spring onions, beetroot, tomatoes, *etc*. Fruits like passionfruit, papaya, mango, banana, avocado, coconut, guava, limes, oranges and water melon are also produced in the region. Irrigation practices vary from localised (dripfeed and sprinkler) to manual irrigation using hoses. Irrigation is also brought to the plantations using river pumps. However, interviewees were concerned about the unsustainable use of water for irrigation purposes, reducing the river basin, and the absence of rain during the rainy season.

There are three types of agriculture practices. There is subsistence farming (*roça*) involving the planting of corn, beans and manioc. Then there are the smallholders who plant to greens and vegetables to sell in local fairs in this municipality and in those nearby. Finally, there are the large farmers who plant mostly sugar cane which is processed and sold as sugar blocks (*rapadura*) and rum (*cachaça*), based on the traditional sugar cane mill (*engenhos*).

As well as the proceeds of agriculture, the municipality derives income from the services sector – commerce, banks, information technology and tourism. No major industry is located in this municipality. There are two banks – the *Banco do Brasil* and *Bradesco* – and some banking correspondents (e.g. lottery offices, post offices), where BF beneficiaries can withdraw their benefit. There is no CAIXA.

PNIR case study "nn"

This is a small municipality with approximately 5,000 inhabitants. It is part of the semi-arid region and the typical vegetation is *caatinga* along with *cerrado* (savannah). The weather is generally hot and rainfall is sparse and scarce and only from March to September. Soils are thin and poor, aside from the valleys.

The majority of the rural workers plant corn, beans and *palma* (cactus palm); others harvest watermelon, pumpkins and grains. Although the climate conditions are favourable for raising goats, there are few goats in this municipality. Small farmers prefer to invest in cattle, despite being more expensive and costly to raise. They feed the cattle with grass during the rainy season and cactus palm during the dry season. There is no municipal fair and they sell their production in nearby municipalities. Irrigation is mainly from rain, and wells and small dams supply water to households, even in urban areas; there is no piped water.

The main revenue comes from either agriculture or sewing. The closest urban municipality has a clothing production industry. This affects the labour dynamic of this case study. Services are not developed: no hotels, no industry, no banks, only one banking correspondent. There is no CAIXA.

PIR case study "i"

This case study has around 12,000 inhabitants. The selected municipality is not part of the semi-arid area although local soils have low natural fertility and high acidity. Interviewees reported that smallholders harvest corn, manioc and beans, generally for their own subsistence. Other farmers engage in pig farming and cattle ranching for meat and milk production. Small farmers have no complex system of irrigation, only the rain or a hand-held hose. Some of the rural villages are not on the national energy grid (although they do have solar panels), and so they are unable to build any type of

irrigation system. Some rural villages are also fishing villages, but commercial fishing is hampered by the lack electricity for preserving the fish.

The municipality derives income mostly from cattle ranching and the two main municipal celebrations – the cattle ranch fest (*vaquejada*) and the corn fest. These popular fetes also stimulate the local services, e.g. hotels and restaurants. There is a weekly market where farmers sell their produce. It is located in the main square, and there are little food stalls. There is one *Banco do Brasil* in addition to one banking correspondent. There is no CAIXA.

PIR case study "ii"

This municipality has approximately 14,000 inhabitants and it is part of the semi-arid country. On the plains and in low areas, the soil is badly irrigated, is deficient in salts and has only medium fertility. In higher areas, the soil fertility is average to high, despite being shallow and rocky. Desertification is taking place in this location, making agriculture unsustainable for some of the population.

Interviewees reported that farming is subsistence. Farmers harvest corn, beans and manioc. Some farmers also invest in livestock, mainly sheep and goats. The majority of the producers are smallholders, although there are also some larger farms producing for commercial purposes.

Income is derived mainly from agriculture. There is a weekly market in which farmers sell their produce. There is one private commercial banking *Bradesco* in addition to one banking correspondent. There is no CAIXA.

3.4.2 Sample design

I conducted extensive fieldwork in two PIR and two PNIR municipalities. Several interviews were not included in the final dataset, but they were instrumental to my in-depth understanding of the local context.

My choice of design strategies depended on the dataset. To understand policy design and concerns at the federal level (RQ2a), I interviewed federal administration staff responsible for the BF programme. Interviewing local administration staff (RQ2b)

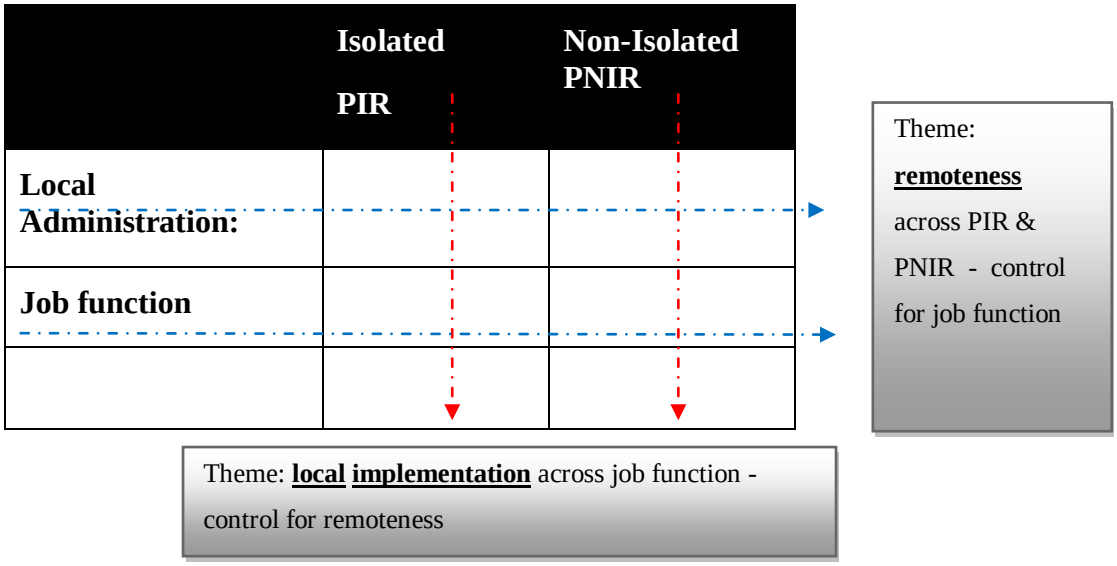
and the households (RQ2c) within each municipality required a more complex research design approach, as explained below.

Dataset: local administration staff

In deciding whom to interview among the local administration staff, I conducted purposive sampling (Ritchie *et al.* 2003a), i.e. interviewees were chosen based on their role in the implementation of the BF programme and grouped according to the location typology. Purposive sampling allows maximum variation of roles (or job functions) and locations, and aims to identify themes that cut across different groups. The identification of central themes captures those features relevant for this analysis.

Table 6 shows the design of the local administration purposive sampling. The rows represent different job functions, and the columns represent different area allocations. In that way, the central themes of the RQ2b of implementation and remoteness cut across each case study (illustrated below).

Table 6: Designing purposive sampling for local administrators



Source: author.

The study sample comprises 14 interviews in total, 11 interviews in social assistance centres and three interviews with banking correspondents, given their role in the distribution of benefits. In some circumstances, there was more than one local administration staff member present, so there were19 interviewees who participated in the 14 interviews, as per Table 7 below.

Table 7: Sample matrix of local administration, according to type of jobs and location

Local Administration job	ISOLATED PIR (# interviewees)	NON-ISOLATED PNIR (# interviewees)
Secretariat of Social Assistance	1	1
CRAS manager	1	2
CRAS psychologist	0	1
Social worker	1	1*
Other CRAS staff (teachers, clerk)	1*	2
***Cadastro* coordinator**	1	1
***Cadastro* technical staff**	2	1
Banking correspondent	2	1
Total	9	10

* Also members of the BF Civil Society Council (ICS)
Source: author.

Dataset: households

This dataset consisted of interviews with parents to explore how remoteness might influence registration practices, knowledge of benefits, compliance with conditionalities, collection of benefits, and social control.

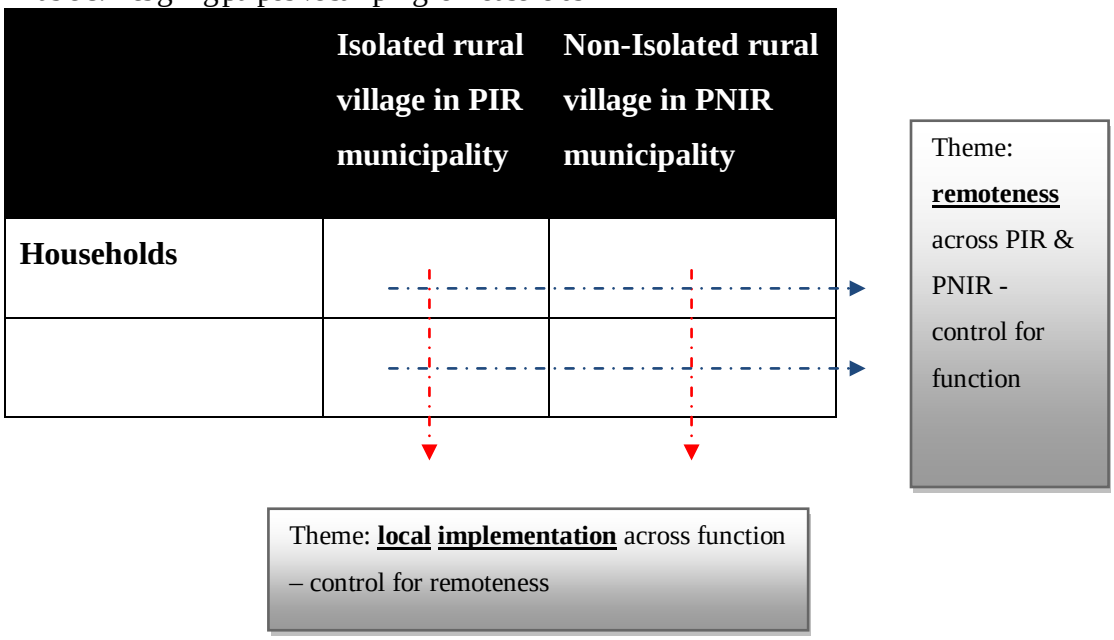
Rural villages were chosen according to the PIR/PNIR typology. The rural villages I am interested in are defined by municipal legislation differently from the way I am defining them for the purposes of this thesis. Technically, the rural villages of this research are classified by IBGE (2008b) as "*aglomerado rural*" or "*povoado*", and this is the terminology I referred to while collecting information. For IBGE a "village" is the name of main town within a sub-municipal urban area called a "district" (*distrito*). The English terminology adopted in this thesis, however, excluded small urban areas (*distritos*) from the sampling frame, even though these areas may still share some common BF household participation issues with non-isolated rural villages.

I categorised isolated and non-isolated rural villages according to the distance from the rural village to the main local town (henceforth "local town" – i.e. the main town from which the municipality derives its name). In order to identify the geographical

location of rural villages within a municipality, I collected information from two sources: interviews with the president of the rural workers' union about the different rural villages within the municipality; and first-hand data collection by driving around the municipality, recording the distance between the local town and the rural villages visited[77]. With this information at hand, I was able to categorise the types of rural villages within a municipality.

I then selected isolated rural villages in PIR municipalities and non-isolated rural villages in PNIR municipalities. I intentionally selected cases within a municipality that would reflect most accurately the typology of isolated and non-isolated rural villages, i.e. villages that were the furthest away from and the closest to the local town, were the most likely to be included in this research. I also selected more than one rural village in each location in order to cross-check the findings across rural villages within the same municipality. Just as in their respective types of municipalities, isolated rural villages had difficult road access to the local town, while non-isolated rural villages had easy road access. I worked in total with 10 rural villages evenly distributed across PIR and PNIR municipalities. Table 8 shows the design of a purposive sample for this dataset.

Table 8: Designing purposive sampling for households



Source: author.

[77] I recorded this information on protocol observations, as described in section 3.4.3 and Appendix 3G.

After selecting the rural villages to be researched, I had to identify and select households. With the help of the president of the rural workers' union, I was able to obtain details of the rural workers' community leader of each rural village. Most of the time, the president acted as a gatekeeper between me and the community, as represented by the village leader. The village leader would either have received a message from the president, or he would contact the president before the interview. Although the interview with the village leader was usually not included in the household analysis in Chapter 8, it was instrumental for my acceptance by the community, and for providing in-depth insights into aspects of remoteness and the living conditions in these rural communities, as analysed in the Chapter 7.

With the community leader's informal approval of my visit, I was then able to collect household data, by interviewing families in their homes and using a snowballing technique. My objective was to build a sample matrix of households with different criteria, based on age, literacy and location, as depicted in Table 9. But before I explain the reasons for the different criteria, I outline below how I directed the sampling process so as to obtain as much variation as possible.

There was no household sampling frame considered adequate for this research. I decided not to use the local *Cadastro* for two reasons. First, using an official government document during the interview could bias households' responses if they perceived me to be associated to the local government. Second, the *Cadastro* would not have any information on those eligible households who had not registered, and it is important to know this in order to find out how the BF reaches the persistently poor.

In order to build a household sampling frame, I devised a household reference sheet to screen for households' eligibility for the BF programme. This sheet, along with housing maps for the villages, assigned an identification number to each household, and started each interview with a few quick facts, such as how many children they had, their ages and education levels, if they were beneficiaries, their benefit levels, *etc*[78].

[78] See the household reference sheet at Appendix 3I.

In this way I was able to identify both the BF households and those households who were eligible but not beneficiaries. The information on income was not always collected because I framed it as an optional open question for reasons of trust and rapport; nonetheless, it could be roughly deduced from such factors as the number of children and their ages, and the types of occupations households reported. Given that I am not concerned with targeting accuracy in the selected case studies, and given, too, that this group has high income volatility, I consider this potential inaccuracy and lack of consistency acceptable for the purposes of this dataset, which is to understand how households participate in the BF programme.

The household reference sheet supplied the information I needed to identify households for the study sample matrix, outlined in Table 9. The household interviewing process, however, went beyond what was needed to fulfil the requirements for the sample matrix. Even after I had already collected the information for the sample matrix, I would still continue the interview, or carry out extra ones, with the aim of thematic saturation (as described in section 3.4.5). In addition, the interviewing process generated trust and understanding of my role within the community. The more interviews, the more accepted I felt and the more households were at ease with my presence in the community. There were also informal norms and values that I had to respect, such as personally talking to elder members of the community and taking time to listen to their stories. These were also enriching for the in-depth knowledge they gave of the histories of those rural locations and of aspects of living there. I conducted 54 household interviews in total, but I selected only 22 interviews for the study sample matrix, evenly spread across PIR and PNIR municipalities.

Table 9 outlines the study sample matrix by the number of interviews in PIR and in PNIR municipalities. The household selection criteria are BF participation, age and literacy. Their purpose is to group similarities and compare differences. As much as possible, I tried to assign one interview to each age and literacy group, according to participation in the BF programme (beneficiary and non-beneficiary) and to location (PIR and PNIR). I was also careful to establish a balance of interviews within each case study, as identified by the letters in parenthesis.

Table 9: Sample matrix of households – criteria based on age, literacy and location

		Beneficiaries		Non-Beneficiaries	
Age	**Literacy**	**PIR**	**PNIR**	**PIR**	**PNIR**
25 years or less	**Less than 4y**	0	2 (nn & n)	0	0
	More than 4y	1 (i)	0	1(i)	1 (n)
26 to 40 years	**Less than 4y**	1 (ii)	1 (nn)	2 (ii)	1 (n)
	More than 4y	1 (i)	1 (n)	1 (i)	1 (nn)
More than 40 years	**Less than 4y**	1 (ii)	1 (nn)	2 (i & ii)	1 (n)
	More than 4y	1 (i)	1 (n)	0	1 (nn)
Total		5	6	6	5

Note: The letters in parenthesis represent the four different case studies.
Source: author.

It is important to analyse BF participation separately because there are concerns about non-take up, the impacts of the programme, and the prioritisation of the poorest. Beneficiaries are defined as households that are part of the BF programme. Non-beneficiaries are defined more loosely, as households that (i) have never been part of the BF, (ii) were part of the BF but had their benefit cut, and (iii) only recently joined the programme. I decided to include the latter group as non-beneficiaries because they can provide better recall of information about their situations before the programme.

Households at different stages face specific challenges stemming from changes in family life-cycle and composition. I have divided households into three age groups based on the household head's age: (i) up to 25 years of age, usually families with younger children; (ii) between 25 and 40, families that usually have older and young

adult children; and (iii) above 40 (and before retirement age), older parents that have usually started assuming grand parenting responsibilities.

I also categorised the households according to their literacy levels. Although literacy is not part of the eligibility criteria for the receipt of benefits, it does affect the ways in which households gather information about eligibility, cancellation, and compliance with conditionalities, and this affects participation rates. As a proxy for literacy levels, I have divided households into two groups: those whose heads have four years or less of study, and those whose heads have had more than four years of study. This decision is based on two findings: that functional illiteracy is generally considered as less than four years of education (UNESCO 2006 p.156); and that rural education in Brazil lasts only four years (World Bank 2003).

3.4.3 Designing research instruments and ethical considerations

Research instruments:

Several instruments were required to conduct this analysis. To find key thematic areas of investigation, I used topic guides which varied depending on which qualitative dataset it was being used for. I also used field notes, protocol observations, household reference sheet (screening), service profiling[79] and maps.

Protocol observations were used to register the infrastructure and the material conditions I observed. There were protocol observations for driving to rural municipalities and villages, and for schools, health centres and CRAS. For each rural municipality and rural village, I would write down the road conditions and the kilometres to the town hall and to the nearest urban municipality. In order to write the protocol observations, I personally interviewed school teachers, head nurses, community-health agents and social assistant secretariats and social workers. I carried out 34 protocol observations.

I got information about the services available, e.g. the access to and the existence, frequency and costs of public transport to schools and health clinics, in the household

[79] Except for the maps, these documents are included in the appendix. The maps are not included to reduce any possibility of identification.

interviews. Whenever I confirmed the same information from different interviewees, I stopped requesting it, as service provision should not vary in rural villages.

I also used maps during fieldwork. I would map households for identification purposes, and all trajectories from the local town to the rural village I visited.

Safety and ethical considerations

I undertook various precautions regarding my safety and the safety of interviewees. For my safety, I kept a protected blog with information on the fieldwork itinerary, with dates that I updated frequently. I also visited the area in the company of a driver. This precautionary measure was very valuable, as we covered extensive territory (about 10 thousand kilometres driving plus some flights). The company of a male driver proved to be particularly useful on arriving and leaving each rural community. Due to land conflicts, I had to be careful when venturing into rural villages. The president of the municipal rural farmer's union acted as a gatekeeper in the case studies. There had been reports of robberies in some North-eastern states and along highways. In order to avoid those roads, I phoned the state highway police bureau in advance to inquire about road conditions and safety.

As for the interviewees, I addressed their safety in various ways. Although I recorded the majority of the interviews, I did not obtain any documentation that would identify the interviewee. This created the confidence required to allow them to speak more freely. I used password-protected files for storing the data, and I guaranteed anonymity for all interviewees. This research received ethical approval from the LSE Research Ethics Committee.

3.4.4 Preparation for fieldwork: the pilot study

In September 2009, before I went to the field, I piloted the interview guides by carrying out 13 interviews at a local municipality. This pilot experience proved to be extremely useful for improving the topic guides, broadening the number of interviewees, and ordering the data-collection phase. It also helped me to understand the heterogeneity of the villages and small towns within a municipality, and led me to investigate isolated rural villages in PIR municipalities and non-isolated rural villages in PNIR municipalities.

The pilot also helped me to practice interviewing and to understand the importance of ordering the questions within an interview guide. This was particularly important in the case of both the beneficiaries of the BF and non-beneficiaries. I noticed that if I started the interview with direct questions related to the BF, the interview dynamic was cut short. On the other hand, broad and narrative questions starting with the interviewee's personal accounts would set a more casual, personal and intimate tone for the interview. I was able to obtain more rapport with the latter approach and this led me to create the household reference sheet.

Interviewing demands practice and this pilot study was pivotal. A successful interview is the one that is an "apparently natural and almost casual conversation" (Gaskell 2000 p.40). It took me several attempts to achieve this and I could only observe my improvement as I practiced. After memorising the interview guides, I was able to re-order the questions so that they evolved naturally. I developed the ability to perceive when the interviewees were at ease and unthreatened while I reassured them with eye contacts and body language.

With the pilot, I reflected on the use of language differences and of moving between different levels of Portuguese. When interviewing public officials, I needed to use a standard Portuguese, without regional expressions or mistakes and with a richer vocabulary. While interviewing beneficiaries, I switched to a more approachable informal Portuguese with regional variations in tone. It was also necessary to use their local language so that the questions would carry the same meaning for interviewer and interviewee.

As a result of the pilot study, I decided to introduce the research instruments described in sub-section 3.4.3, in order to capture the in-depth contextual information. Furthermore, I requested the assistance of a more experienced researcher than myself to check a couple of my interviews. This measure aimed to ensure the quality of the work.

3.4.5 Data collection

I interviewed the federal administration staff in September 2009, and also while conducting the case studies from February to July 2010. I visited the four case-study sites from March 10th to 30th, from April 12th to 26th, and from May 18th to June 26th.

I spent, on average, 14 days in each municipality, not counting the various long round trips by car and plane in order to arrive at the sites.

I collected two types of data: naturally occurring data and generated data (Lewis 2003). Given that geographical location is an important aspect of this study, I collected data in its natural settings, using observation and participant observation approaches. I wrote down my observations of occurrences and descriptions of places ("thick description"). I also lived in the areas where the research was carried out. This helped me to build trust and rapport in these communities which had never received researchers before. I was invited to a funeral, a religious celebration, to share meals/coffee with households, and to talk to one elderly member of a rural community. These rich opportunities contributed to my understanding of how the context influenced people's perceptions of their families and relationships, and of the programme, formal and informal institutions, and the state.

The generated data were the interviews. Primary data were collected through face-to-face, in-depth and semi-structured interviews. I attempted to avoid double negatives or double-barrelled questions when interviewing. I avoided preambles and too abstract questions, focusing instead on simple, short and clear statements. While listening to the interviewee's responses, I probed in order to obtain detailed and specific answers to my questions.

I interviewed federal and local administration staff at their workplaces, preferably in a private room. I would first ask about their function and an explanation of their work routine, and then I would go into details of the BF operation. More specific and sensitive questions would arise naturally later on, during the conversation after the interview tone was set.

While interviewing households, I would first ask some factual questions, then open up some space for their life story, and finally I would ask about the BF and specific thematic questions. The household reference sheet was used as a conversation start-up, as factual questions are easier answer. The reference sheet opened the dialogue between interviewee and interviewer, setting up the contextual scenario for more complex questions on programme participation such as juggling children's school attendance with other household responsibilities.

I interviewed households in their home environment, providing me with yet another opportunity to collect observational data. I was unable to have a separate room for interviewing. In some cases, the husband or a neighbour wanted to observe what I was doing, and this snowballed to other interviews. Any request for privacy in this community environment would have been counter-productive: cutting off my relations within the community. As well, the paired (or triad) interviews provided an opportunity to note dialogue, reflections, and agreement in themes. However, sometimes the quality of the recording was compromised as external noises made it difficult for transcribing. I did not transcribe doubtful parts of the recording.

Table 10 details the ways in which the interviews were registered, the total number of interviews, the range of durations of the interviews, and the total interview time. Informed consent was digitally recorded.

Table 10: Dataset details

		Total number of interview	**Duration of interviews (range h:mm)**	**Total interview time (hh:mm)**
Federal administration staff database	8 digitally recorded	8	0:24 to 1:55	10:07
Local administration staff database	10 digitally recorded 4 notes taken during interview	14	0:45 to 1:26	10:00
Households	21 digitally recorded 1 notes taken during interview	22	0:11 to 2: 28	60:57
TOTAL		44		81:04

Source: author.

Negotiating research relationships:

Two strategies were used to negotiate access and to develop research relationships: one at the federal level and another one at the municipal level.

In September 2009 and from January to July 2010, I was a visiting scholar at the International Policy Centre for Inclusive Growth, an initiative partnered by the United Nations Development Programme and the Government of Brazil. My position in this institution was very important in negotiating access to the key federal government staff responsible for the BF/*Cadastro* design, implementation and evaluation, and in organising one-to-one interviews with them.

In the case studies I used the concepts of "corpus construction" and "saturation" (Bauer & Aarts 2000). Corpus construction is a "systematic selection" process (p.20) intended to give public accountability to the research. In order to build the corpus, Bauer and Aarts suggest: "(a) to select preliminarily, (b) to analyse this variety, (c) to extend the corpus of data until no additional variety can be detected" (p.31). The latter step is saturation.

I built the study sample systematically, working with two strands of interviewees. The first strand started at the municipal rural workers' union, went from there to the local rural community leader, and ended at households. The second strand started at the local administration of CRAS, from there to the Education and Health Secretariats, and ended at local school teachers and community health agents. I was very careful not to use the local administration strand to generate a sampling frame of households, in order to protect households and to avoid any perceived links between me and the local administration[80].

I also asked to the president of the rural workers' union about the main issues rural workers in a given municipality faced, and about the distribution of rural districts and villages in the area. The president acted, most of the time, as a gatekeeper between the local community leader and me, as some of the rural villages were wary of outsiders. With these two contacts (the president and the local community leader), I was able to knock on households' doors, introduce myself and quickly screen their eligibility for the programme. I used snowballing techniques to identify additional households.

[80] It was important not to be associated with the local administration as the fieldwork was conducted in the electoral year of 2010.

While conducting interviews, I analysed the variety contained in the sample in order to decide whether I needed to extend the interviews to another rural district or village. I approached saturation in the corpus when I started hearing similar accounts in different rural communities. Saturation was also observed through the triangulation of the information about the implementation processes of the BF programme between beneficiaries and the local administration. In each case study, I interviewed at least two rural communities within a municipality. I am confident that the number of interviews and the time I spent in the field were adequate to obtain enough variation to draw implications for the PIR and PNIR municipalities I visited.

3.4.6 Data analysis, validity, reliability and generalisability

I carried out content and thematic analysis using a mix of NVivo codes and the framework method (Ritchie *et al.* 2003b). I developed the coding frame with reference to the literature and including the predetermined themes of participation, remoteness and implementation. This was updated after the pilot study. Some interviews I transcribed myself, for others I had assistance[81]. In both cases, each transcript was double checked while playing the recording and subsequently read several times. I used NVivo to code the transcripts and to develop further codes. Then, I used the framework method to continue synthesising while retaining key ideas of interviewees. Theoretical links and hierarchies were produced in a later stage of the data analysis (Ritchie *et al.* 2003b; Spencer *et al.* 2003).

Generalisability, reliability and validity

The use of case studies in this thesis aims to establish possible inferential or analytical generalisations, but not representational generalisations, that is, those conducted with statistical analysis (Lewis & Ritchie 2003). Generalisations are working hypotheses, not conclusions. Inferential generalisation is utilised when the circumstances described in a case study could be inferred for another case study. Analytical generalisation happens when a specific case study enlightens the general theoretical debate.

[81] In the case of external transcribers, I secured confidentiality agreements ensuring consideration of research ethics.

I paid particular attention to issues of reliability, which is important for applied policy research. I was careful to outline all the systematic approaches to data collection and analysis, I constructed a sample with large variations and saturation, and I covered the relevant ground during fieldwork with the four case studies and several interviews.

I address validity with several comparisons and triangulations. The comparison of findings among four case studies strengthens internal validity. External validity was obtained through several triangulations: triangulation of methods (quantitative and qualitative), triangulation of sources (observations and interviews), and triangulation through multiple analyses (federal, local and household levels).

I did not pursue "communicative validation" (Gaskell & Bauer 2000 p.348), also known as respondent validation, where the researcher shows the transcripts and results to the interviewees, involving them in data processes and analysis. I could not consider this validity criterion, as access to the municipalities where I did the interviews is too difficult for a follow-up visit.

3.5 Analytical framework

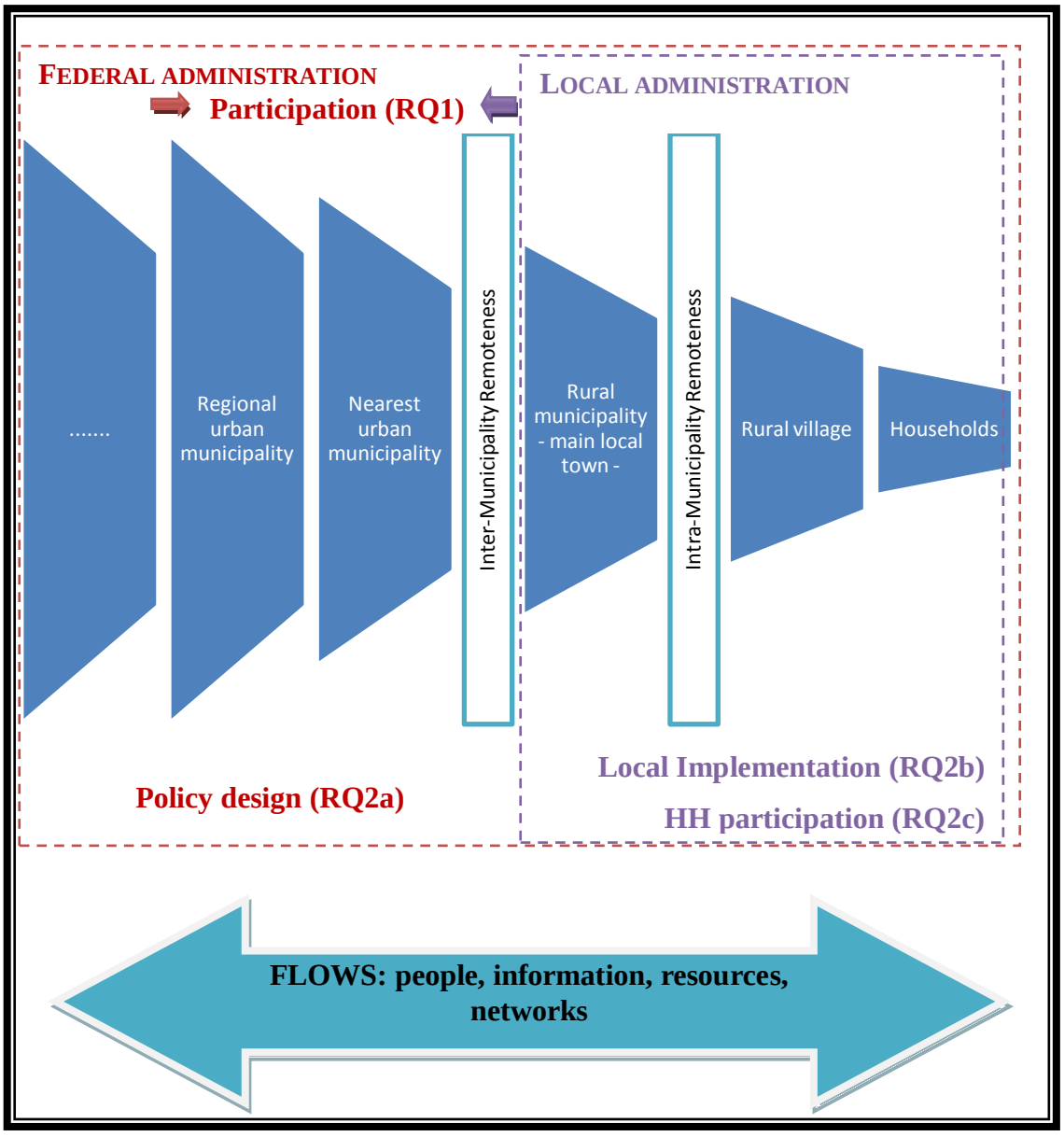
The analytical framework brings together all datasets and their relationship to the proposed research questions.

RQ1 is addressed in the analysis of the relationship between the federal and local spheres of government, as both national policy prescriptions and local administrations influence the effectiveness of the BF in reaching the rural poor. The reach of the BF is captured by the quantitative dataset in Chapter 4, and by investigating the national policy design (RQ2a), based on the federal qualitative dataset, in Chapter 5.

The analytical framework illustrated below divides remoteness into two different types, analysed in detail in Chapters 6 and 7. The first type, which I call **inter-municipality remoteness**, is the kind of remoteness that lies behind the PIR and PNIR typology, that is, the distance of rural municipalities from the nearest urban municipality. The second type of remoteness – the **intra-municipality remoteness** – relates to the distance between the rural village and the main local town with all the local administration apparatus. The latter kind of remoteness is used to classify the rural village into either isolated or non-isolated. Although the effects of remoteness

could be minimised by investments in infrastructure (road quality) and technology (mobile phones, internet), the classification is justified by the fact that the municipalities studied still lack adequate investments. By analysing the two types of remoteness separately, it will be possible to address them differently, resulting in both short-term BF policy recommendations and long-term structural policy interventions.

Analytical framework:



Source: author.

Local administrations play an important role in BF implementation, as they are the intermediaries between household needs and local, state and national policies. Local

implementation (RQ2b) is analysed in Chapter 6 in the context of these two types of remoteness. I base this analysis on the local administration dataset.

Households are also classified according to their location. The types of remoteness, explored in Chapter 7, influence how households take-up services (RQ2c). This analysis, conducted in Chapter 8, is based on the household qualitative dataset.

Finally, across all different geographical locations there are different types of flows. I use the concept of flows found in the literature on the geography of movement (Santos & Silveira 2004) and adapt it for this study. Santos and Silveira believe that the density of spaces, both natural (forests, land, vegetation, *etc*.) and artificial (ports, roads, cities, *etc*.), presents a snapshot of the current situation, as well as giving historical accounts of that location. Connecting the spaces together are movements of fast or slow flows. These flows can be understood, either in the material sense, such as flows of transportation, or in the social sense of relationships, power and the division of labour.

The thematic analysis of the interviews enabled me to separate these flows into the following categories: (i) flows of people, observed in migration patterns or household composition changes; (ii) flows of material and human resources linked to the local economy; (iii) flows of knowledge, represented by formal and informal access to information; (iv) flows of political influence, comprising networks that help or hinder access to opportunities. These flows support parts of the argumentation of Chapters 6, 7 and 8.

3.6 Appendices

Appendix 3A: The Map of Poverty and Inequality: the variable poverty
Appendix 3B: The multimodal network dataset and network analysis
Appendix 3C: Data management: identification of the municipality code in the Ministry of Education dataset
Appendix 3D: Exploratory data analysis
Appendix 3E: Description of variables
Appendix 3F: Using the quantitative dataset to inform the selection of case studies
Appendix 3G: Protocol observations
Appendix 3H: Service profiling information
Appendix 3I: Household reference sheet

4 BOLSA FAMÍLIA'S PARTICIPATION RATES IN POOR ISOLATED RURAL (PIR) AND POOR NON-ISOLATED RURAL (PNIR) MUNICIPALITIES, 2004-2009

In terms of maximizing effectiveness, therefore, the real challenge lies in the problem of 'how to reach the difficult to reach' in our societies. And this challenge contains a moral element when those who do not or cannot express their needs are the victims of diswelfares inflicted by society.
Titmuss (1968 p.67)

4.1 Introduction

This chapter starts the analysis of the research question (RQ1) **"How effectively does the BF reach the rural poor in remote and non-remote rural municipalities?"** or to put it differently "Do BF participation rates in PIR municipalities differ from those in PNIR municipalities? Did the expansion of the BF from 2004 to 2009 reach more households living in areas that are comparatively poorer?" It is plausible to consider that a programme could have higher participation rates in municipalities that have better infrastructure to identify and locate those in need more effectively. Thus, I investigate this question by using the quantitative datasets described in the previous chapter, and analysing two trends:

(i) The BF participation rate from 2004 to 2009, and

(ii) The changes in participation rates according to poverty levels.

It is necessary, however, to briefly review some concepts. Effectiveness is understood as a policy achieving its objectives. Several studies have calculated the effectiveness of the BF according to how well it reduces poverty and inequality.

- Soares (2013 pp.156, 157), using PNAD microdata, calculated that in 2004 the BF was responsible for a 2% reduction on poverty headcount (US$2 purchasing power parity per day). In 2009, the BF was responsible for a 0.9% reduction. Impacts were higher in rural areas; and for children and for adults between 25 and 40 years, the BF reduced poverty by three to four percentage points. It was also responsible for 14% of the reduction in inequality between 1995 and 2009 (p.164).

- Hoffmann (2013), using the 2008-9 POF[82], decomposed the GINI index by income source, and found that the BF is the source of income that contributes most progressively to reducing inequality, compared to labour income, pensions, social transfers and other sources of income (rent, donations). Concentration curves reaffirm this finding that the BF is the most progressive social protection transfer payment.
- Soares *et al.* (2010b p.9), using 2004 and 2006 PNADs, showed that the BF was responsible for a fifth of the reduction in inequality during this period.
- Using the 2007 PNAD, Rocha (2013 pp.155, 156) demonstrated that the BF reduced the poverty headcount by 3.3% in 2007, with a greater reduction in rural areas (11.3%)[83]. According to the author, inequality fell from 0.599 in 1997 to 0.538 in 2009 (p. 153). Two-thirds of the fall in inequality (or 4.2 percentage points) was due to income from employment, while transfers (BF and BPC) accounted for a reduction of 1.1 percentage points. Although transfers represented only 1.3% of family income, they were responsible for 18% of the fall in inequality in this period (p.153).

As discussed in Chapter 1 and in line with Titmuss' statement in the opening of this chapter, this thesis contributes to the debate by analysing the BF in terms of "maximizing effectiveness". It is important to state that the author (1968 p.65) understands "effectiveness" in two ways: (i) maximising the delivery of services that people cannot get access to without recourse to the state; and (ii) ensuring that social policies and services meet needs, sometimes articulated, other times not articulated (due to fear or stigma), and sometimes not even perceived (e.g. mental health services). The hard-to-reach are also often unable to express their needs, "Yet they are often the people with the greatest needs" (p.66).

Atkinson (1989 pp.191-193) suggested a number of reasons why people might not take-up a benefit in cash transfer programmes, and hence reduce the effectiveness of

[82] *Pesquisa de Orçamentos Familiares* (Household Budget Survey).
[83] Rocha, using the POF, derives 25 poverty lines and 25 extreme poverty lines based on the average of consumption baskets of low income families. For example, this researcher uses five poverty lines and five extreme poverty lines for the Northeast in 2004 (p. 188). The lines range from R$36.67 (or 14% of the minimum wage, approx. US$12.73 in 2004) for the rural northeast, to R$90.72 (or 17% of the minimum wage, approx. US$ 31.50 in 2004) for Recife, per month per capita. For information on the exchange rate refer to BACEN (2014).

the programme by preventing it from reaching the whole of the intended population. Those reasons are: (i) choice; (ii) costs that reduce the effective value of the benefit; (iii) stigma; (iv) administrative errors; (v) lack of information, *etc*. This author also asks an important question of effectiveness in take-up: even if households receive the benefit, to what extent does it address their needs?

These considerations of "maximizing effectiveness" proposed by Titmuss and Atkinson lay the foundations of how I will address the concept of effectiveness throughout this thesis, as I have previously identified in Chapter 1.

Participation rates are the percentages of households receiving the BF over the total number of households in PIR or PNIR municipalities. The word "participation" is sometimes used as a synonym for take-up. Potential beneficiaries need to actively participate in the process of claiming the benefit and undertaking means tests, so that the authorities can determine eligibility and grant the benefit.

However, participation rates differ from take-up. The estimation of take-up is complex: "[I]t depends on being able to identify those families who would receive the benefit if they were to claim, and this is not easy" (Atkinson 1989 p.190). In contrast, the participation rate only refers to the percentage of people who are actually taking part in the benefit within a specific community, municipality, region or other geographical delimitation. Calculating the BF take-up rate would have involved estimating the number of eligible families who were poor but had not claimed the benefit, whereas the BF participation rate is the number of actual BF beneficiaries as a proportion of the whole population. It is important, too, not to equate either take-up or participation rates with the percentage of the population actually living in poverty. Take-up is an estimation of poverty based on programme's eligibility thresholds, and these do not necessarily reflect poverty lines.

Although there is no analysis of BF participation rates specific to PIR and PNIR municipalities, there is research comparing participation rates in rural and urban areas of different geographical regions of Brazil. This could give a broad picture into which poor rural municipalities can be inserted.

Using a representative sample of municipalities and data from various sources (PNAD, Human-Development Index and federal transfers), Marques (2005 pp.21-24)

found that in 2004 the largest number of BF beneficiaries were in northeast Brazil (69.1%), followed by the Southeast (19.1%), the North (8%), the Centre-West (2.4%) and the South (1.4%). In the Northeast, the participation rate by municipality varied from 13% to 45%, the higher participation rate having been found in urban municipalities with up to 20,000 inhabitants and rural municipalities with up to 100,000 inhabitants (pp.16-17).

It is important to note that Marques' study is dated 2004, and the BF had not been entirely rolled out. Assessment of participation rates that early may only reflect the rates of previous programmes that were brought under the BF umbrella programme.

Using the 2004 PNAD, Bastagli (2008) conducted a regression analysis on the probability of programme participation according to location. This analysis affirmed the fact that households in rural areas were more likely to receive the BF than households in urban areas. According to the author:

> This effect increases for extremely poor households. For the latter, the predicted probability of programme participation is 56.0% (compared with 47.2% probability of participation for urban households holding all other independent variables fixed at the mean), while among poor households this probability decreases to 48.6% (against 42.7% for poor urban households). (p.201).

As explained in Chapter 3, PNAD includes rural areas of various municipality sizes and characteristics, following IBGE's categorisations of rural areas by census sectors. It may be the case that rural areas located near metropolitan urban areas are more likely to receive the benefit than rural areas in small municipalities. The methodology I use in this thesis will analyse BF participation rates in similar types of poor rural municipalities.

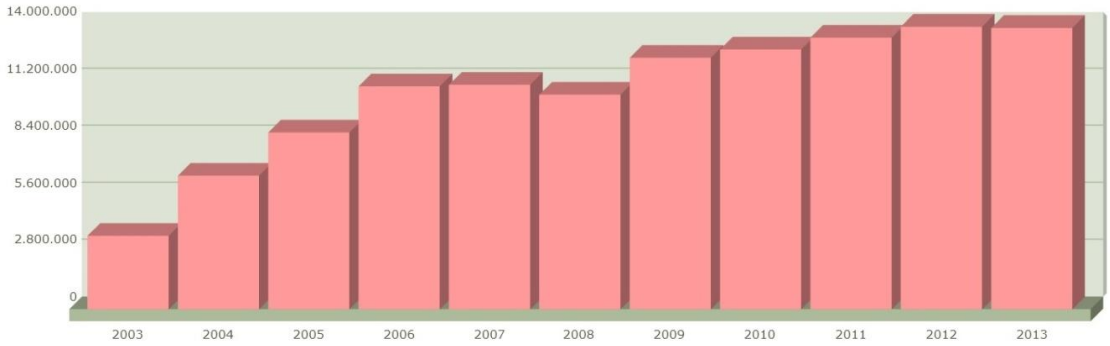
The second analysis of this chapter conducted in section 4.4 concerns the changes in participation rates according to poverty levels. This issue could be informed by the literature on the BF targeting efficiency.

- Soares *et al.* (2007 p.2) show that, according to the 2004 PNAD, the BF has a 59% under-coverage (or exclusion error), and 92% exclusion targeting (the ratio of non-beneficiary non-poor to the total non-poor).

- Soares *et al.* (2007 p.3), using the ratio between the cumulative distribution of transfers and the cumulative distribution of pre-transfer income, show that, for the poorest10%, the BF does not perform as well as the CCT programmes in Mexico and Chile, but for the second quintile of the income distribution its performance is similar. Overall, the BF is the best performer of the three programmes.
- Reviewing the literature, Soares (2012a p.15) found that the incidence curve of the BF in 2006 showed a small deterioration from 2004, although the 2006 incidence curve was still comparable to CCT programmes in Chile and Mexico.
- However, some authors are concerned about the high BF exclusion error. Kerstenetzky (2008 p.14) said that an exclusion error of 59% is "a conspicuously high figure".
- Rocha (2013 p.126) conducted simulations using the 2004 and 2006 PNAD and poverty lines derived from the POF[82] and found that the expansion from 2004 to 2006 was not directed towards the extreme poor, as the potential impacts of transfers in households that were eligible but non-beneficiaries remained the same.
- On the basis of an analysis of the 2006 PNAD supplement, Rocha (2011) estimated that there were still 3.4 million eligible households without the benefit, 1 million of them in extreme poverty (measured according to the BF administrative extreme poverty line). The author cautioned that the improvement in the exclusion error was mostly due to increases in income earnings in the poorest families, instead of an improvement in targeting *per se*, as there was an increase in the inclusion error from 2004 to 2006.

For the period analysed in this thesis, the expansion of benefit receipt happened mainly from 2004 to 2006, as illustrated in Figure 4 below.

Figure 4: BF expansion, 2003-2013 (households)



Source: Reprinted from Ministério do Planejamento Orçamento e Gestão (2013).

2006 was an electoral year, and this deserves special attention. The exponential growth in benefit allocation in the first half of the year may be a result of political favouritism. TCU (2006) investigated this claim and concluded that the atypical distribution was due to delays in incorporating beneficiaries from other programmes into the BF, and to the decision to concede benefits in the first six months of 2006, before the electoral period starting in July. TCU cross-checked the *Cadastro* data with the Electoral Tribunal database, and concluded that there was no association between the expansion of the programme and the mayor's political party. However, TCU (p.259, item 3.5) acknowledged that, given that the BF reaches a high percentage of Brazilian households, it could potentially influence electoral ends. Hunter and Power (2007 pp.19, 20) showed that the BF did influence the voting behaviour of potential BF beneficiaries in the national election. The authors point to a correlation between BF expansion in 2006 and vote swings to Lula in comparison with the 2002 election result. They showed that Lula was able to control 78% to 85% of the votes in the oligarchic states of Bahia and Maranhão. Zucco Jr's research (2013) reinforced this analysis by showing that CCTs result in electoral rewards for the candidates, despite low rates of party affiliation and low results in sub-national voting preferences.

This chapter is organised as follows. Section 4.2 briefly describes some statistics relating to PIR and PNIR municipalities. Section 4.3 illustrates the participation rate trends, and section 4.4 discusses these trends according to poverty levels. In both sections, there are brief descriptions of overall trends, followed by descriptive statistics on rural and urban, PIR and PNIR municipalities, and macro-regional analysis. Section 4.5 concludes this chapter.

4.2 Descriptive statistics on PIR and PNIR municipalities

Table 11 illustrates the number PIR and PNIR municipalities by macro-region.

Table 11: PIR and PNIR municipalities by macro-region

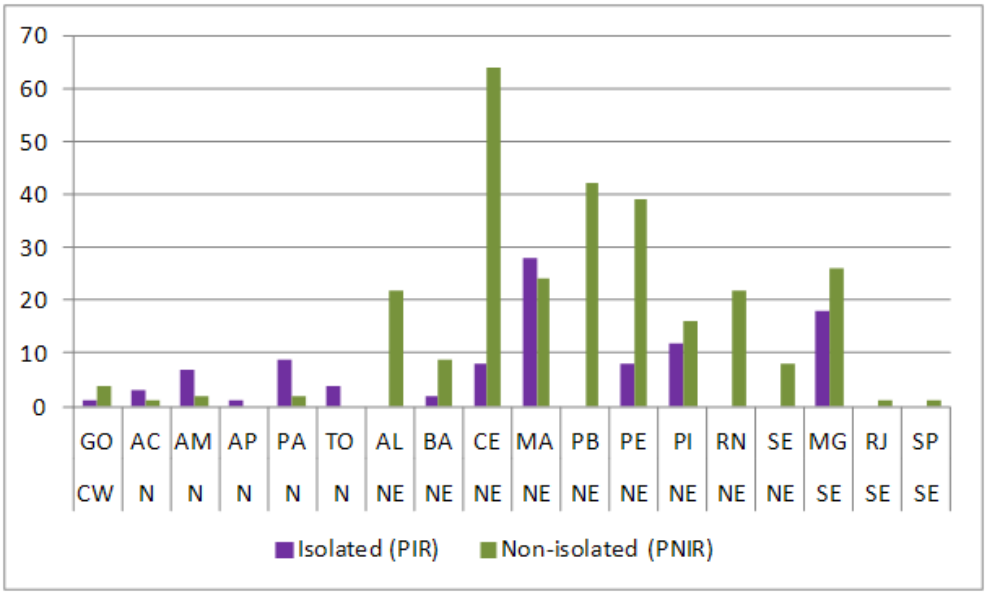
Macro-region	PIR	PNIR	TOTAL
North	**24 (23.76%)**	5 (1.77%)	29 (7.55%)
Northeast	**58 (57.43%)**	**246 (86.93%)**	304 (79.17%)
Centre-West	1 (0.99%)	4 (1.41%)	5 (1.30%)
Southeast	18 (17.82%)	**28 (9.89%)**	46 (11.98%)
TOTAL	101 (100%)	283 (100%)	384 (100%)

Source: author based on MoPI and BCIM.

Table 11 also shows that the majority of PIR and PNIR municipalities are in the Northeast of Brazil. The other two important macro-regions are the North for PIR municipalities and the Southeast for PNIR municipalities. Given that the Amazon is located largely in the North, where roads are fewer and protected environmental areas are concentrated, municipalities in the North have fewer connection points. It is, therefore, reasonable to expect that this region would have a high percentage of PIR municipalities. As for PNIR municipalities, Figure 5 below shows that the majority in the Southeast are located in the state of Minas Gerais.

Figure 5 illustrates the distribution of PIR and PNIR by states. Figure 5 shows that PNIR municipalities are concentrated in the states of Ceará (CE), Paraíba (PB), Pernambuco (PE), and Maranhão (MA). PIR municipalities are mainly alocated in the states of Maranhão and Piauí (PI). The Southeast state of Minas Gerais (MG) has a high incidence of both types.

Figure 5: Distribution of poor rural municipalities by state and region



Source: author based on MoPI and BCIM.

Although Marques' study (2005) did not focus on the poor rural municipalities, the descriptive statistics above confirm the significance of BF participation rates in municipalities of the Northeast of Brazil.

In section 4.4, I categorise poverty into low, medium and high levels, as explained in Chapter 3, Table 4 (p. 84). The high poverty level is then subdivided into a lower and an upper bound. Table 12 shows how many PIR and PNIR municipalities there are in each of these upper and lower bounds. Thus, the findings of sub-section 4.4.2 are merely suggestive, given how few municipalities there are in the high poverty, upper bound category.

Table 12: PIR and PNIR municipalities by high poverty levels (lower and upper bound)

	PIR		TOTAL	PNIR		TOTAL
	Lower bound	Upper bound		Lower bound	Upper bound	
2004	94	5	**99**	270	11	**281**
2007 and 2009	95	6	**101**	271	12	**283**

Source: author based on MoPI and BCIM.

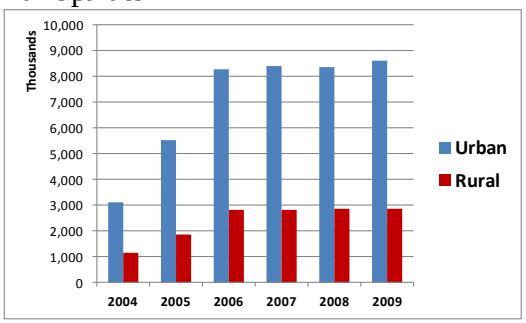
4.3 Descriptive statistics on participation rates

4.3.1 Participation rates in rural and urban municipalities

Using the definition of rural and urban municipalities proposed in Chapter 3, Figure 6 shows that municipalities that are predominantly urban have higher numbers of BF benefits. In the case of participation rates, Figure 7 shows that municipalities that are predominantly rural have higher rates.

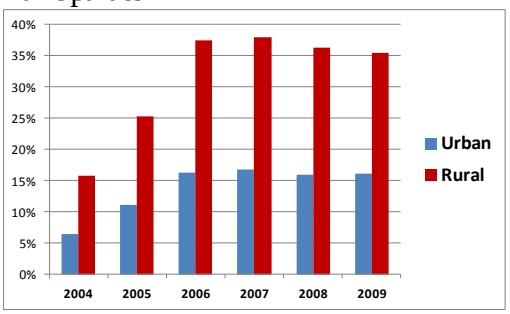
These findings validate the findings of earlier work that demonstrated that the BF was a well-targeted CCT programme (Lindert *et al.* 2007; Soares 2012b), having higher participation rates in rural areas where there are higher percentages of households in poverty (IBGE 2008c; IFAD 2008). However, it is important to keep in mind that, although the programme has higher participation rates in rural areas, this does not mean that there are more households in rural municipalities receiving the programme, quite the contrary.

Figure 6: BF households in rural and urban municipalities



Source: author's calculation using MoPI, PNADs, *Contagem Populational*, *Cadastro*.

Figure 7: BF participation rates in urban and rural municipalities



Source: see Figure 6 for details.

Both figures show increasing trends that are in accordance to the literature. Previous research showed that percentages of the BF beneficiaries started to increase from 2004 and reached the target (henceforth, "quota") of 11 million households in 2006 (Lindert *et al.* 2007; TCU 2006). From 2006 to 2008, the numbers of BF households stabilised once the national quota was reached. In addition, in 2006 stricter monitoring of conditionalities started to result in some cancellations. In 2009/10, there was another increase in the BF coverage to 13 million households.

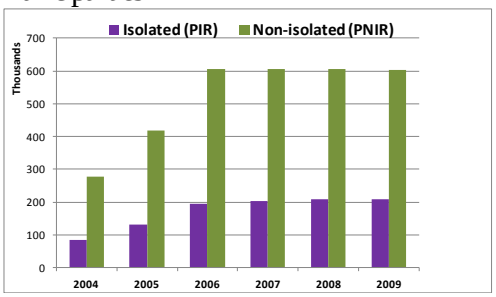
The trend towards a slight reduction in participation rates after 2007, shown in Figure 7 was more noticeable in rural municipalities. This needs to be further investigated. Given that Figure 6 shows no decrease in BF benefits, this reduction in participation rates is most likely due to changes in the rural population. But, how much of this change is the result of actual increases in the population, and how much is the result of the IBGE's estimation methods? It is most likely a combination of both. IBGE recognises the difficulties involved in the population projections used to estimate municipal population (IBGE & UNFPA 2006 p.11). Considering that the dataset may have a bias towards over-estimating participation rates[84], when rates start to decrease, there may still be a certain element of real population increase.

4.3.2 Participation rates in Poor Isolated Rural (PIR) and Poor Non-Isolated Rural (PNIR) municipalities

Figure 8 and Figure 9 show the total number of beneficiaries and the participation rates by PIR and PNIR municipality.

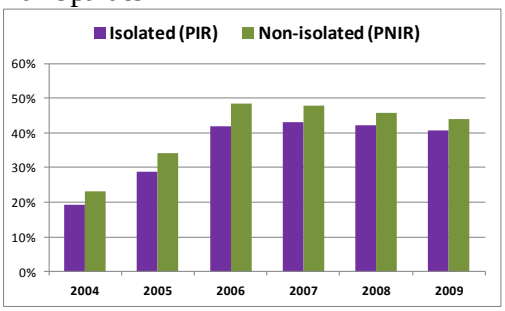
[84] The denominator of participation rates (the population estimates) per municipalities may be underestimated at two points: (i) the calculation of municipal populations (which is based on the average number of persons in a household per year and per state); and (ii) in areas with high migration flows. This has the potential to overestimate participation rates, resulting in an analysis based on trends and not on point estimates.

Figure 8: BF households in PIR and PNIR municipalities



Source: author's calculation using MoPI, BCIM, PNADs (2004, 2005, 2006, 2008, 2009), *Contagem Populacional* (2007), *Cadastro* (2004 – 2009).

Figure 9: BF participation rates in PIR and PNIR municipalities



Source: see Figure 8 for details.

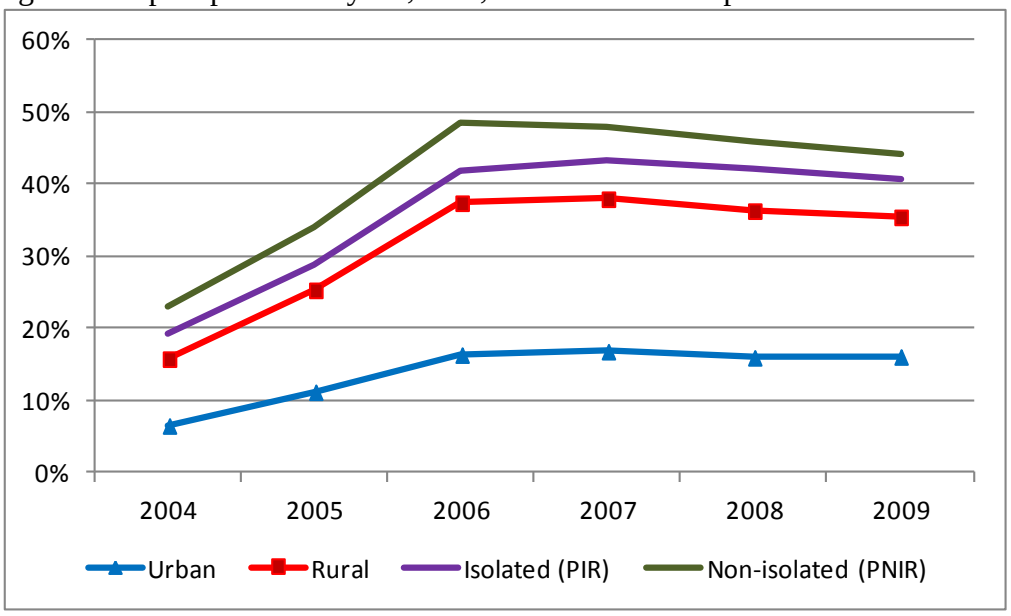
Figure 8 shows that PNIR municipalities have more beneficiaries than PIR municipalities. Figure 8 shows similar patterns of expansion as Figure 6: an increase from 2004 to 2006, followed by stabilisation from 2006 to 2009. Therefore, the expansion of the programme in PIR and PNIR municipalities followed patterns similar to the BF expansion nationally.

Taking into consideration participation rates, Figure 9 shows that PNIR municipalities have consistently higher participation rates than PIR municipalities. The consistently lower participation rates in PIR municipalities are prima facie evidence of problems in maximising the effectiveness of reaching out to the persistently poor. This is a reason for concern. According to the literature on chronic poverty (CPRC 2008b), spatial disadvantage and weak integration can be one of the causes for spatial poverty traps. Thus, in RRAs such as PIR municipalities, there may be a greater need for the BF, as there are fewer job opportunities for the poor. Potential beneficiaries may have stronger incentives for claiming the BF, and yet participation rates in PIR municipalities are consistently lower than in PNIR. In the next sub-section, I discuss the ways in which the participation rates in PIR municipalities are different from those in other types of municipalities. This is followed by a discussion, in section 4.4, of participation rates and poverty levels, moving the account closer to a discussion of take-up rates.

4.3.3 Comparisons across typologies and macro-region

Figure 10 compares participation rates in PIR and PNIR municipalities with the rates in both rural and urban municipalities more generally.

Figure 10: BF participation rates by PIR, PNIR, urban and rural municipalities from 2004 to 2009



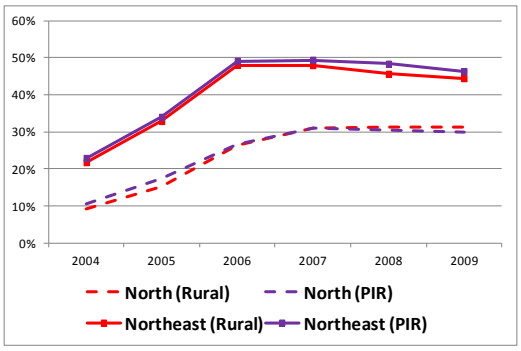
Source: see Figure 8 for details.

Figure 10 shows that PIR and PNIR municipalities have higher participation rates than urban and other rural municipalities. This is a positive finding, as PIR and PNIR are a subset of the poorest rural municipalities, and higher participation rates are only to be expected.

To analyse the macro-region, I focused on 81% of PIR municipalities, located in the North and Northeast, and on 97% of PNIR municipalities, located in the Northeast and Southeast.

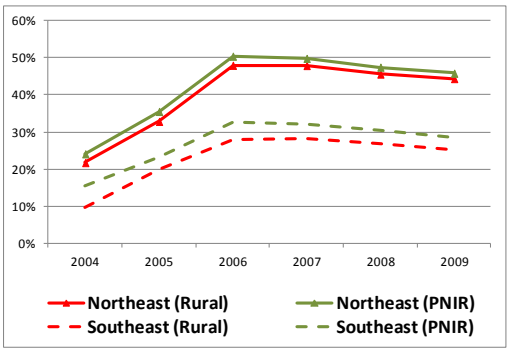
Figure 11 and Figure 12 compare participation rates in PIR and PNIR municipalities with those in other rural municipalities. These figures were constructed considering the participation rate of each macro-region, given their population size, so, they cannot be added together.

Figure 11: Participation rates in PIR and rural municipalities in the North and Northeast of Brazil



Source: see Figure 8 for details.

Figure 12: Participation rates in PNIR and rural municipalities in the Northeast and Southeast of Brazil



Source: see Figure 8 for details.

Both figures also show the gap in participation rates between other rural municipalities and the PIR and PNIR municipalities. Figure 11 shows a disturbing trend of the reducing gap between PIR municipalities and other rural municipalities in the North of Brazil (dotted purple and red lines). From 2007 onwards, the participation rates in PIR municipalities are lower than the rural average. In contrast, Figure 12 shows a constant gap between PNIR municipalities and other rural municipalities in the Southeast of Brazil across the years, with the participation rates of the PNIR municipalities consistently higher than the rural average.

In sum, (i) participation rate trends from 2004 to 2009:

- The increase in the numbers of BF beneficiaries from 2004 to 2006, and again from 2009 to 2010, is a result of the federal government's effort to reach the 11 million and 13 million targets. Urban municipalities have more households benefitting from the programme but rural municipalities have higher participation rates.
- From 2006 to 2009, there were small variations in the numbers of BF beneficiaries, as the programme reached its 11 million national quota and the system to monitor conditionalities became effective. It is difficult to determine whether the small reduction in the participation rates of rural municipalities after 2007 was due to population growth, or whether it was the result of a limitation in my methodology reflecting broader problems with the IBGE population estimates for small rural municipalities.

- PIR and PNIR municipalities have higher participation rates than other rural municipalities. This finding is in agreement with other findings showing that poor households are well targeted by the BF, as there are higher levels of poverty in PIR and PNIR municipalities than in other rural municipalities.
- PNIR municipalities have higher participation rates than PIR municipalities. Lower participation rates in PIR municipalities are a matter of concern. The persistently poor that live in RRA have reduced livelihood strategies and lower livelihood diversification of income sources.
- Higher participation rates in the Northeast for both PIR and PNIR municipalities confirm the good targeting of the programme on that historically disadvantaged region.
- Lower participation rates in PIR municipalities may be an aspect of the lower participation rates in the North of Brazil. Participation rates in that region are below those of other rural municipalities. This is also a matter of concern.

Considering that the BF expanded from 2004 to 2006 to reach the national quota, and that from 2006 to 2009 only small increments were allowed, it is important to understand the geography of expansion and whether the benefits expanded to areas that needed the most. This is what I turn to next.

4.4 Descriptive statistics on poverty and participation rates

This section compares poverty rates and participation rates in order to find out how closely participation rates are associated with poverty levels (i.e. as a preliminary investigation of take-up rates). I look at the poverty variables in two ways: as a continuous variable, with scatterplots, and as a categorical variable, with bar charts.

There are several data constraints that preclude the investigation of take-up rates. Take-up rates require an estimation of the number of poor households, according to the BF threshold, in a given municipality. This estimation involves calculating the number of poor that have registered and have not registered for the programme, hence they have not claimed the benefit. The former can be estimated using datasets (cadastro, surveys) but the latter is an inherent problem of take-up analysis.

Estimating the number of eligible households who are not in the government's radar screen is not an easy task. Governments often try to circumvent this by increasing access to information. However, this thesis points to evidence based on interviews with local administration staff (Chapter 6) and households (Chapters 7 and 8) that access to information is not the only problem the population these areas face. The qualitative analysis will demonstrate that access to registration points, lack of documentation and migration patterns are some of the other problems when registering for the benefit. One possible approach estimate the number of eligible households not registered for the programme is to conduct a sample survey of the population at risk (Atkinson 1989), but this has not been attempted for the specific interest group of this research, i.e. the rural poor living in rural remote areas.

As for the calculation of the number of poor households registered at the Cadastro over time, an analysis of the take-up would require a series data points to assess whether families fit the programme's eligibility and whether and when they receive the benefit. Some of the limitations of this approach refer to the quality of the Cadastro information, recording errors, the potential variability in collection data methods and, most importantly, the limited access to series of Cadastro data points and restrictions of access to data on household and municipality levels. The latter restrictions made this approach impossible to pursue for the purpose of this research.

Researchers have opted instead to use PNAD estimations (Medeiros et al. 2008; Soares et al. 2009; Soares 2012a,2012b; Soares et al. 2010b). But, again, this approach is not adequate for the population researched, as PNADs are not representative for this population. Coverage and targeting based on PNADs are aggregated for Brazil or regional areas. Therefore, analyses like those conducted by the prevailing literature were not pursued for the subpopulation analysed.

Thus, I compare participation rates with poverty rates, as a preliminary investigation into the BF take-up rates. This comparison also has data constraints and limitations.

This section's analyses of poverty are based on the MoPI. As discussed in Chapters 3 and Appendix 3A, the MoPI poverty headcount was calculated before the BF programme started and uses different methods and datasets than the BF programme.

Although this method is not strictly a take-up analysis, which is difficult to conduct as previously explained, it is a preliminary investigation into take-up rates in small rural municipalities of Brazil. It is indicative of possible problems with take-up rates, while participation rates are compared with poverty levels. It indicates how the programme expanded during this period, using 2003 poverty levels as a baseline. Aside from providing trends overtime, this method also enables a comparison between municipalities with higher or lower poverty incidence with the official BF number of beneficiaries over time.

Another data limitation is that the MoPI poverty rates are measured as of 2004. There is no updated small area estimation of poverty levels by municipality in order to compare the expansion of the programme with the changing poverty lines. However, despite Brazil's economic growth during this period, Brazilian research indicates the continuation of high levels of poverty in the municipalities analysed. The 2010 Census confirms that poverty levels in small municipalities in the Northeast of Brazil continued to challenge policy-makers (MDS 2011).

The persistency of poverty in RRA is reaffirmed by international research. Bird *et al.*(2010b p.11) question the claim that RRAs benefit from economic growth through spill-over effects and multipliers. This, they argue, failed to happen. Kanbur and Vernables (2005) argue that current inequalities in RRAs would most likely result in unequal growth, leaving these areas behind. Therefore, based on the latest Brazilian Census and the international literature on persistent poverty in RRA, the premise that poverty have not varied significantly and continues to persist in the poorest small rural remote municipalities of the Northeast of Brazil is valid and plausible.

Another data constraint relates to the calculation of population estimates. As noted in Chapter 3, participation rates are based on estimations of the total municipal population, based on state average of number of persons in a household. This approximation is unavoidable, as there is no annual population counting for small municipalities.

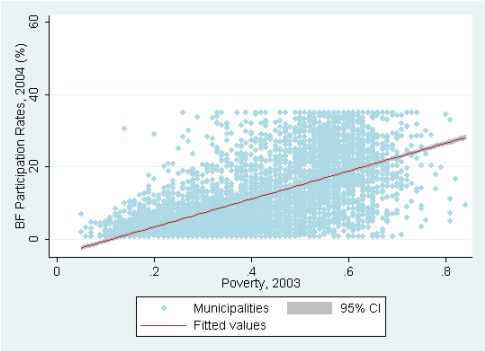
Lastly, I avoid the comparison between the expansions of number of beneficiaries or of participation rates with the official municipal quota allocation. Derived from the

national quota, the municipal quota was based on the 2000 Census and the PNAD. The objective of this section is to compare the distribution of benefits using other methods of calculating poverty than the PNAD, given its limitations already described in Chapters 2 and 3. In addition, the national quota is limited by budgetary restrictions and, as such, it may not be the best proxy for the number of poor households. In the next chapter, I extend the analysis of the PNAD's limitations by conducting a detailed investigation on how the national quota was allocated to small rural municipalities.

Taking the 2004 poverty levels and the participation rates in 2004 and 2009, Figure 13 and Figure 14 consist of scatterplots marking the trends of participation rates by poverty levels with a fitted regression line[85]. Each dot represents a municipality.

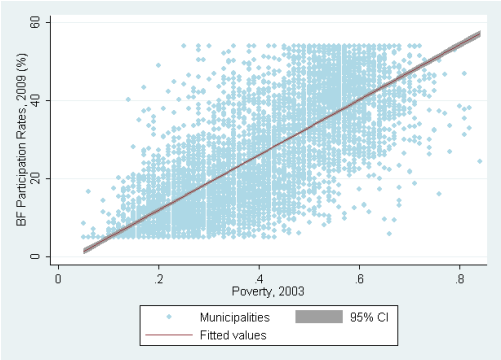
[85] The scatterplots are truncated at the top and bottom of the distribution by the winsoring process which sets limits to the top and bottom percentiles of the distribution. For more details, refer to Appendix 3D.

Figure 13: BF participation rates by poverty, 2004



Source: author's calculations using MoPI, PNAD (2004), *Cadastro* (2004).

Figure 14: BF participation rates by poverty, 2009



Source: author's calculation using MoPI, PNAD (2009), *Cadastro* (2009).

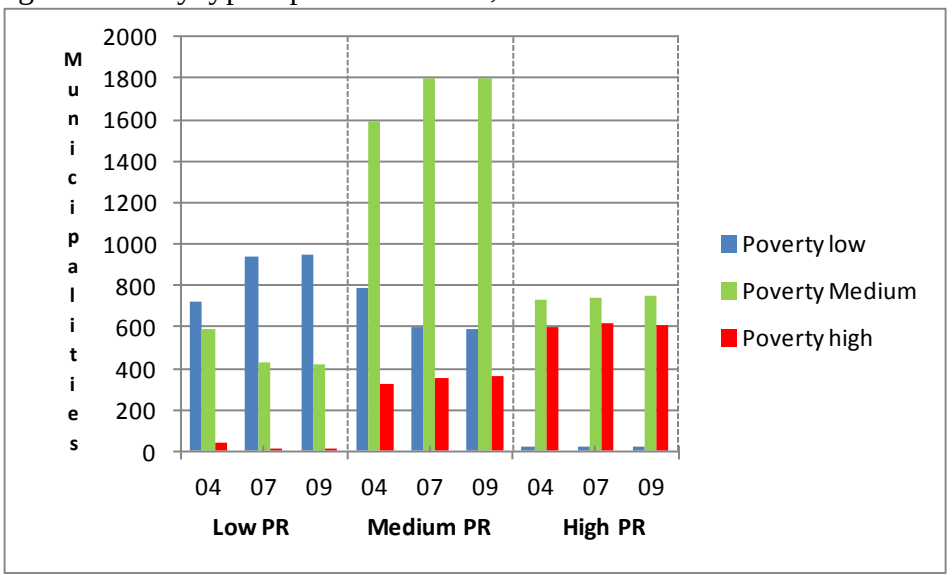
The scatterplots above show a generally positive relationship between poverty and participation rates, i.e. the higher the poverty the higher the participation rates. However, the distribution of municipalities around the regression line indicates that this relationship is rather moderate, although there have been improvements over time. The moderate relationship means that the relationship between poverty and participation rates is not as direct as the BF eligibility criteria should have ensured. The plots show municipalities with a high incidence of poverty and comparatively lower participation rates, a finding that signals problems of non-take-up. There is also a group of municipalities with high participation rates, even though they have only medium levels of poverty. Although some fuzziness is only to be expected, given that the poverty figures are dated 2003, these figures do point to problems in take-up rates[86].

Figure 15 illustrates the analysis based on poverty and participation rates categories. It confirms the findings illustrated in the scatterplots. Participation rates are categorised in quartiles of their distribution (Q1 or the lowest 25% of data and Q3 the

[86] There are caveats to the scatterplots. There is some indication of heteroskedasticity, as high values of poverty are a necessary but not sufficient condition for high participation rates. This reinforces the case made by this thesis – that variables like distance may influence take-up rates. The error term may be spatially or serially correlated, i.e. error terms of observations in non-isolated municipalities may be correlated with nearby municipalities, or with observations from preceding years. These caveats do not invalidate the findings displayed in the figures; rather, those findings underline the importance of this thesis. Further analysis would require additional datasets with municipality-level variables, but that would move the analysis beyond the objective of this chapter. Refer to Chapter 9, section 9.7, "Implications for future research".

highest 25% of data). The vertical axis shows the number of municipalities, and the horizontal axis the categorisation of participation rates into low, medium and high quartiles.

Figure 15: Poverty by participation rates in 2004, 2007 and 2009



Source: author's calculations using MoPI, PNAD (2004, 2009), *Contagem Populacional* (2007), *Cadastro* (2004, 2007, 2009).

Figure 15 confirms the positive relationship illustrated in the scatterplots. It shows that the number of municipalities with low poverty rates is relatively higher in the group of municipalities with low participation rates, and the number of municipalities with high poverty rates is generally higher in the group of municipalities with high participation rates.

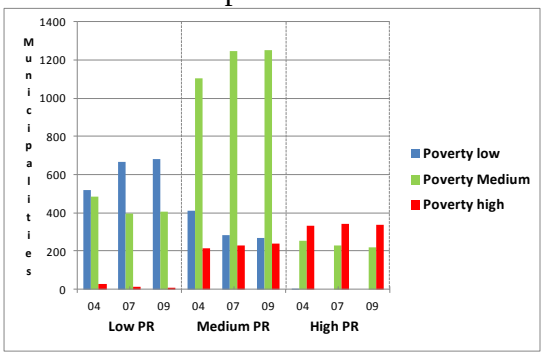
Another interesting trend relates to the changes in group categories during the expansion of the programme from 2004 to 2009. The expansion resulted in better allocation of benefits per poverty levels for municipalities with low and medium poverty rates. Municipalities with low poverty rates reduced in importance in the medium participation rates group; likewise, municipalities with medium poverty rates reduced in importance in the low participation rates group. The scatterplots show this improvement in take-up rates by the increase in the slope from 2004 to 2009, and by the dispersion of points around the regression line.

Nonetheless, there was only marginal improvement in those municipalities with high participation rates. Figure 15 shows that there was a group of municipalities in the medium participation rates group with consistently high poverty levels. The scatterplots show municipalities below the regression line despite high poverty levels, indicating non-take-up problems. This means that there could be municipalities where eligible poor households (those with high poverty levels) were not receiving the benefit (medium participation rates). This finding led me to undertake a further analysis to find out if participation rates varied according to location (rural or urban; PIR or PNIR; macro-regions). This analysis takes up the remainder of this section.

4.4.1 Poverty and participation rates in rural and urban municipalities

Figure 16 to Figure 19 subdivide the dataset by rural and urban municipalities, illustrated with bar charts and scatterplots.

Figure 16: BF participation rates by poverty levels in urban municipalities



Source: see Figure 15 for details.

Figure 17: Participation rates by poverty in urban municipalities, 2004, 2009

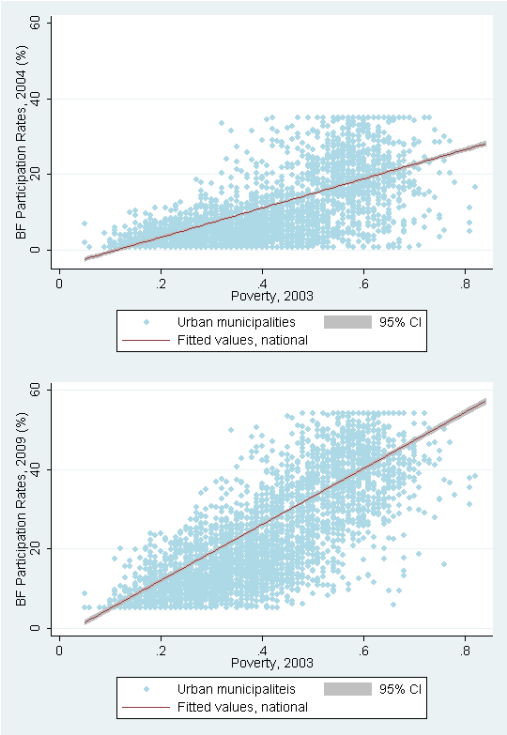
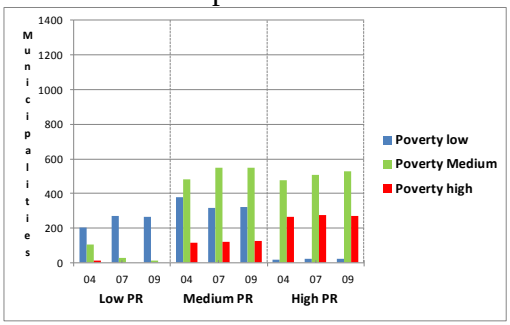


Figure 18: BF participation rates by poverty levels in rural municipalities



Source: see Figure 15 for details.

Figure 19: Participation rates by poverty in rural municipalities, 2004, 2009

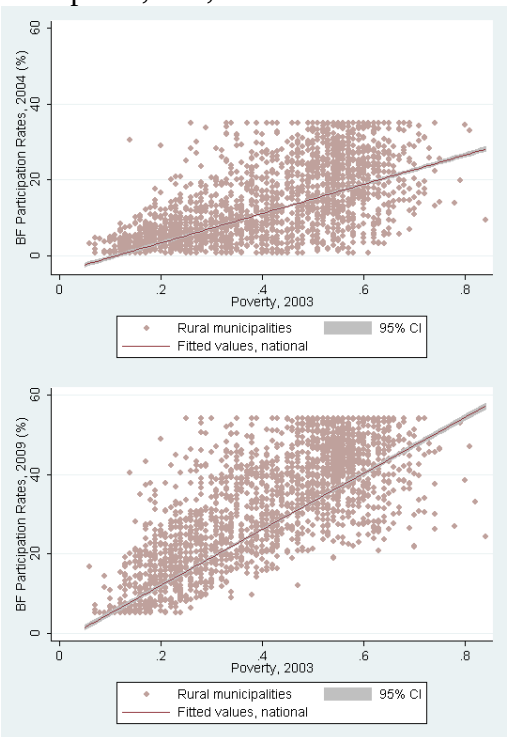


Figure 16 shows that urban municipalities categorised with low poverty levels are concentrated in the group of municipalities with lower participation rates. Similarly, areas with medium poverty levels have generally medium participation rates. This relationship improves over time. However, this is not the case for urban municipalities with high poverty levels. Figure 17 illustrates municipalities with high poverty levels below the national regression line (i.e. with low and medium participation rates), indicating problems with non-take-up[87].

Figure 18 shows that rural municipalities are more concentrated around medium-high participation rates and Figure 19 visually represents this clustering by higher number of municipalities above the national regression line in 2009. This reaffirms the literature that states how the BF has higher coverage in rural areas (Rocha 2013; Soares 2013).

However, municipalities that have increased their participation levels in 2009 were primarily in the group of low-medium poverty levels. This is observed by fewer municipalities with low and medium poverty levels below the national regression line and by their dispersion above the national regression line, indicating higher participation rates. However, municipalities with high poverty levels – i.e. PIR and PNIR municipalities – are below the national regression line, indicating low and medium participation rates. Thus, although rural municipalities are clustered around medium and high participation rates, this does not mean that rural municipalities with high poverty levels would have more take-up rates. This is the focus of the next sub-section.

The literature has highlighted the possibility that BF has a rural bias that results in a higher risk of excluding the poor in urban areas (Bastagli 2008 p.205). I found that participation rates in rural municipalities were clustered around the medium and the high categories (Figure 18), whereas participation rates in urban municipalities (Figure 16) were clustered around the low and the medium categories. This may

[87] An analysis of non-take-up in urban municipalities, although important, is beyond the scope of this thesis.

initially indicate that municipalities that are predominantly rural may have higher likelihood of households receiving the benefit.

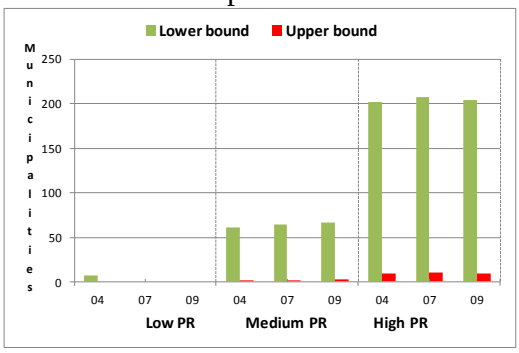
However, my analysis was methodologically different from the prevailing literature and I must caution against identifying the results based on municipalities with those based on household characteristics (and vice-versa), avoiding the ecological fallacy. Inferences based on PNADs take into consideration the households' census sector (smallest area) and not the municipality where the poor live. PNAD inferences mean that households living in rural census sectors may have higher inclusion rates than those living in urban census sectors; independently of the municipality they are located.

Higgins (2012) argued that the BF does not take into account spatial price differences, resulting in eligibility cut-off and transfer sizes biased towards rural areas. This author proposed that the eligibility cut-off and transfer size be adjusted by spatial price differences. I would recommend caution towards the author's recommendation. Even though there are price differences for the five macro-regions, further analysis conducted in this thesis (Chapters 6, 7 and 8) revealed the heterogeneity of rural areas. There will most likely be negative impacts on the persistently poor as a result of such recommendations.

4.4.2 Poverty and participation rates in PIR and PNIR municipalities

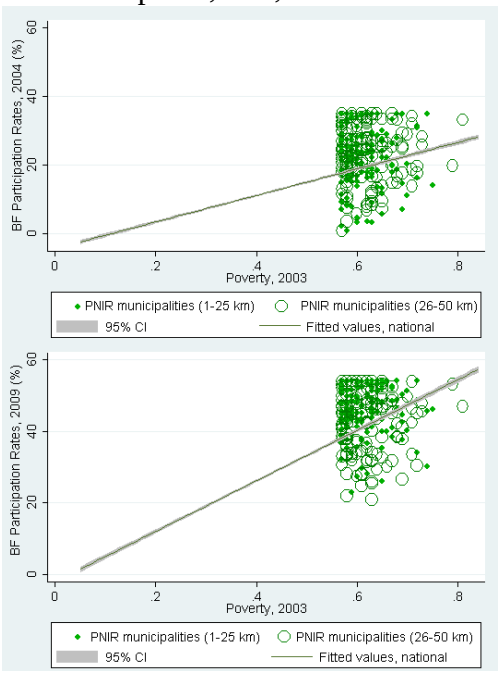
Figure 20 and Figure 22 show the analysis of the poorest rural municipalities (PIR and PNIR) by participation rates and poverty categories (including the lower and upper bounds of the high poverty category) for 2004, 2007 and 2009. The different sizes of the circle areas in Figure 21 and Figure 23 are proportional to the distances from each poor rural municipality to the nearest urban municipality.

Figure 20: BF participation rates by poverty levels in PNIR municipalities



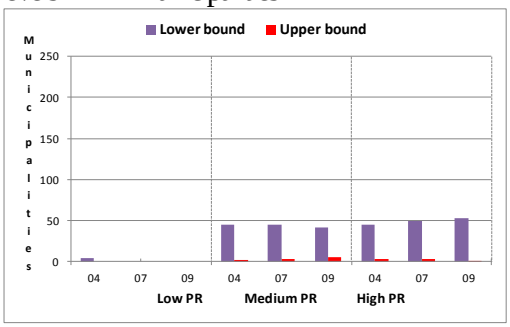
Source: author's calculation using MoPI, BCIM, PNADs (2004, 2009), *Contagem Populacional* (2007), *Cadastro* (2004, 2007, 2009).

Figure 21: BF participation rates by poverty in PNIR municipalities, 2004, 2009



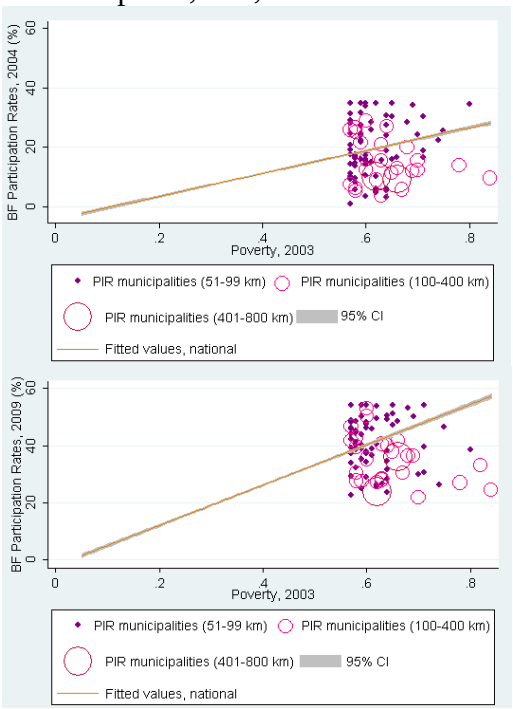
Note PNIR municipalities: area of symbol proportional to the distance to the nearest urban municipality.

Figure 22: BF participation rates by poverty levels in PIR municipalities



Source: see Figure 20 for details.

Figure 23: BF participation rates by poverty in PIR municipalities, 2004, 2009



Note PIR municipalities: area of symbol proportional to the distance to the nearest urban municipality.

Given that these municipalities are the poorest, their participation rates in Figure 20 and Figure 22 should be grouped in the high category. Although there are no PIR or PNIR municipalities in the low participation rate group after 2004, there is still a considerable number of these municipalities in the medium participation rate group. This is illustrated in Figure 21 and Figure 23 by the dispersion of municipalities below the national regression line.

In Figure 20, PNIR municipalities show better allocation of benefits, not only because they have proportionately fewer municipalities in the medium participation rate group, but also because there are only a few municipalities in the extreme poverty level (upper bound) in the medium participation rate group. Figure 21 shows that there were more municipalities closer to the national regression line in 2009 than in 2004.

This is not the case for PIR municipalities (Figure 22). Not only can one find more PIR municipalities in the medium participation rate group if compared to PNIR, but PIR municipalities at the extreme poverty level are mostly located in the medium participation rate group. The scatterplots (Figure 23) show more PIR municipalities than PNIR municipalities below the national regression line. The results suggest the possibility of relative lower participation in PIR municipalities, by demonstrating problems with non-take up in PIR municipalities with high poverty levels in 2004 and 2009. This is most worrying.

Another important issue is that problems with non-take-up are associated with distance to the nearest urban municipality (Figure 21 and Figure 23). As already stated in the beginning of this section (Figure 14), the relationship between poverty and participation rates was moderate and the variable distance seems to be influencing this. This is evidenced by the higher number of remote municipalities below the national regression line. This finding confirms the hypothesis of this thesis, that it is more difficult to reach out to the persistently poor in RRAs. Even though there was an improvement in take-up rates from 2004 to 2009 in both PIR and PNIR municipalities, remote municipalities had comparatively lower take-up rates.

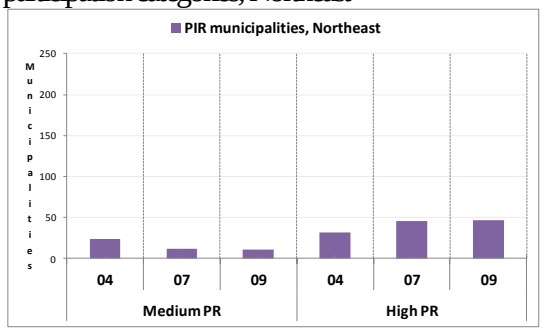
This sub-section complements the findings shown in Figure 9, of consistently lower participation rates in PIR municipalities, relating distance to participation rates.

Figure 20 to Figure 23 shows that non-take-up problems are more evident in PIR municipalities, and that distance (or weak linkages to urban municipalities) has an effect on take-up rates, despite high poverty levels.

4.4.3 High poverty and participation rates categories by macro-region

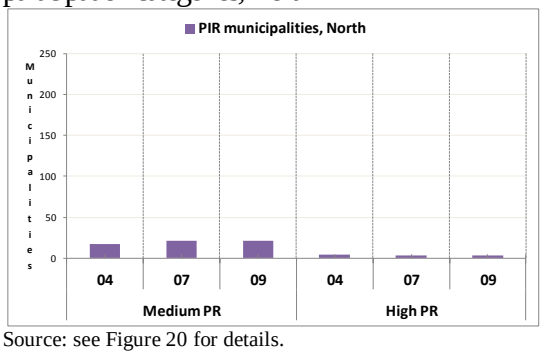
Figure 24 to Figure 27 show participation rates by poverty levels of PIR and PNIR municipalities, classified according to macro-region. Further analysis by macro-region should be undertaken with caution, as the sub-division by macro-regions reduces the number of municipalities in each PIR and PNIR category, as previously described in Table 11, p.131.

Figure 24: PIR municipalities (high poverty) by participation categories, Northeast



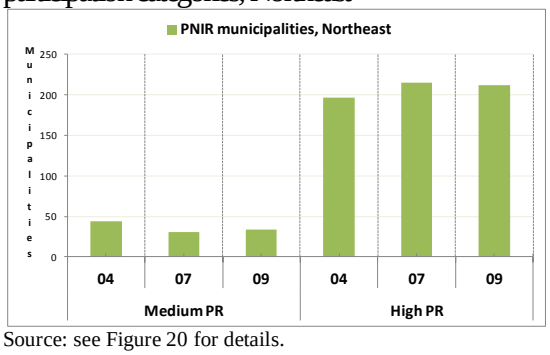
Source: see Figure 20 for details.

Figure 25: PIR municipalities (high poverty) by participation categories, North



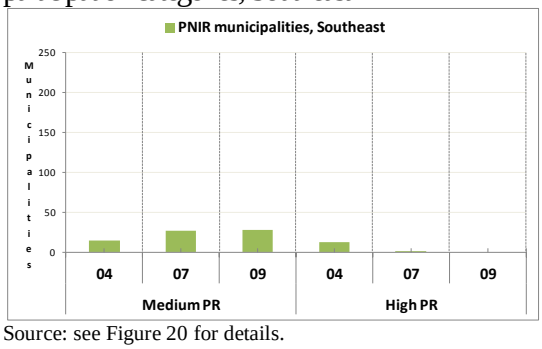
Source: see Figure 20 for details.

Figure 26: PNIR municipalities (high poverty) by participation categories, Northeast



Source: see Figure 20 for details.

Figure 27: PNIR municipalities (high poverty) by participation categories, Southeast



Source: see Figure 20 for details.

The Northeast (Figure 24 and Figure 26) have better participation rates according to poverty levels than other regions (Figure 25 and Figure 27). Both PIR and PNIR municipalities in the North (Figure 25) and Southeast (Figure 27) are mostly in the

medium participation rate group, and the situation for these municipalities worsens over time. Instead of these municipalities joining the ranks of municipalities with high participation rates, some of them moved down to join the group of medium participation rates.

In sum, (ii) changes in participation rate according to poverty level:

- In general, municipalities with low poverty levels are concentrated in the low participation rates group; likewise, municipalities with higher poverty levels are concentrated in the higher participation rates group. However, there is room for improvement, mainly in those municipalities with high poverty levels. This is demonstrated by the way municipalities are dispersed around the regression line.
- Urban municipalities allocate benefits according to poverty levels better than rural municipalities. However, in 2009, they still had non-take-up problems, as shown by the fact that 42% of urban municipalities with high poverty levels still had low-to-medium participation rates. This is demonstrated by the number of municipalities with high poverty that are below the national regression line. The expansion of the programme from 2004 to 2009 clustered urban municipalities mostly in the categories of low-to-medium participation rates.
- The expansion of the programme in rural municipalities from 2004 to 2009 bundled up rural municipalities into groups with medium to high participation rates. However, the expansion did not follow municipalities' poverty levels. In 2004, 65% of rural municipalities with high participation rates had low and medium poverty levels, and by 2009, this number had increased by two per cent. This means that the increase in benefit take-up happened primarily in areas with low and medium poverty levels. Non-take-up problems remained in rural municipalities with high poverty levels, as some of these municipalities were in the group with only medium participation rates.
- Considering the subgroup of PIR and PNIR municipalities, the relationship between participation rates and poverty levels is not direct, as shown in the scatterplots.

    - PNIR municipalities have better distribution of participation rates according to poverty levels than PIR municipalities. The reduced dispersion of municipalities around the national regression line in the scatterplots of PNIR municipalities, shows the improvements in take-up rates by 2009.
- However, some PNIR municipalities that are farthest from the nearest urban municipality have only medium participation rates. This relationship is primarily observed in PIR municipalities, indicating that participation rates are influenced by distance to the nearest urban municipality.
    - In the case of PIR municipalities, there is much to be improved. Only 53% of PIR municipalities in 2009 were in the group of high participation rates, leaving 47% of them in the medium participation rate category.
- What is most concerning is that PIR municipalities show only a slight improvement in take-up rates across the years (represented by the unchanging dispersion around the national regression line). The analysis suggests the possibility of relative lower participation in PIR municipalities, mainly of those with high poverty levels and the most remote ones – they continue to be below the national regression line.
- The Northeast of Brazil has better allocation of BF participation rates for the group municipalities with high poverty levels than the North or Southeast, although some municipalities are still in the medium participation rate group.
- PIR municipalities in the North of Brazil and PNIR municipalities in the Southeast have the worst distribution of benefits according to poverty levels. In the North and the Southeast, the majority of the PIR and PNIR municipalities with high poverty levels are clustered around the medium participation rate, and this majority has increased over time.

4.5 Conclusion

In this chapter, I start to investigate RQ1, i.e. the analysis of how effectively the BF reaches out to poor rural municipalities. I look at the descriptive statistics of participation rates and trends of BF expansion by poverty levels from 2004 to 2009. This chapter follows the BF's objective that participation rates should be higher in

places that have higher poverty. Thus, areas with persistent poverty, such as the poorest rural municipalities located in RRA, i.e. PIR municipalities, should have higher participation rates than other types of rural municipalities.

The analysis based on municipalities also provides an alternative assessment of effectiveness to the conventional use of household analysis and targeting indicators. I specifically focus on the idea of "maximizing effectiveness" in order to understand how the programme reaches the hard-to-reach in PIR municipalities. In addition, the municipality-based analysis adds a different dimension to the BF discussion, by recognising that local municipalities are important agents in identifying potential beneficiaries and facilitating the BF implementation.

The general analysis reinforces the understanding that, on average, the BF is a well-targeted programme. Rural municipalities have higher participation rates than urban municipalities, although there are more benefits in urban municipalities. PIR and PNIR municipalities have higher participation rates than the average participation rates of rural municipalities. There was also an overall improvement in participation rates per poverty levels from 2004 to 2009. This can be observed in the rise in the slope of the regression line and the moderately direct relationship between poverty and participation rates.

However, there is some room for improvement. There are a number of rural and urban municipalities with continuous high poverty levels that are located in the medium participation rate group, or below the national regression line. This is a serious indication of non-take-up problems, meaning that there are poor households who are going without the benefit.

Although rural municipalities clustered around the medium to high participation rate groups, this chapter shows that rural municipalities do not always allocate benefits according to poverty levels. Even though living in a rural municipality may increase the likelihood of having benefits allocated to the population, a closer look at benefit distribution suggests that some of the municipalities do not have as good distribution of benefits per poverty levels as might be expected.

This is particularly the case for PIR municipalities. The analysis suggests that PIR municipalities have had relatively lower participation rates than PNIR municipalities across the years. This is worrisome. Considering that the poor in PIR municipalities most probably live in persistent poverty, having less opportunity to diversify their livelihoods strategies, federal transfers like the BF are an important component of their household budget.

Evidence indicates that PIR municipalities, mainly the ones located in the North of Brazil, have worse levels of BF participation rates by poverty levels. PIR municipalities with high poverty levels and further from the nearest urban municipalities tend to be part of the group with medium participation rates. This evidence demonstrates problems with non-take-up rates. That there are eligible persistently poor who are non-beneficiaries in the worst-off municipalities, is a matter for concern. Reduced BF participation rates in PIR municipalities exacerbates the predicament of persistent poverty in RRAs.

The findings detailed in this chapter led me to inquire into the **reasons** for the lower take-up rates in PIR municipalities than in PNIR municipalities. Among possible reasons I would suggest (i) that PIR municipalities, despite having high levels of persistent poverty, have reached their **local quota** of BF allocations (Chapter 5); (ii) that PIR municipalities, despite having high levels of persistent poverty, are unable to have higher participation rates due lack of **implementation** capacity (Chapter 6); and (iii) that PIR municipalities have fewer **households** who request to take-up benefits, either because persistent poverty levels are lower, or because households are unable, for reasons to be investigated, to claim the benefit (Chapters 7 and 8).

These three suggested reasons laid the foundation for the remainder of this thesis, which examines why there are lower take-up rates in PIR municipalities. The investigation of the nature of rural poverty in RRA, and an analysis that goes beyond income poverty, are themes that run throughout the thesis. The reasons for and the calculation of the local quota, together with the selection mechanisms, are addressed in the next chapter, followed by subsequent chapters on the investigation of local implementation by municipalities, and households' participation in the BF programme. With this broader picture in place, I return to the question of the

effectiveness of the BF in reaching poor rural municipalities in the concluding chapter.

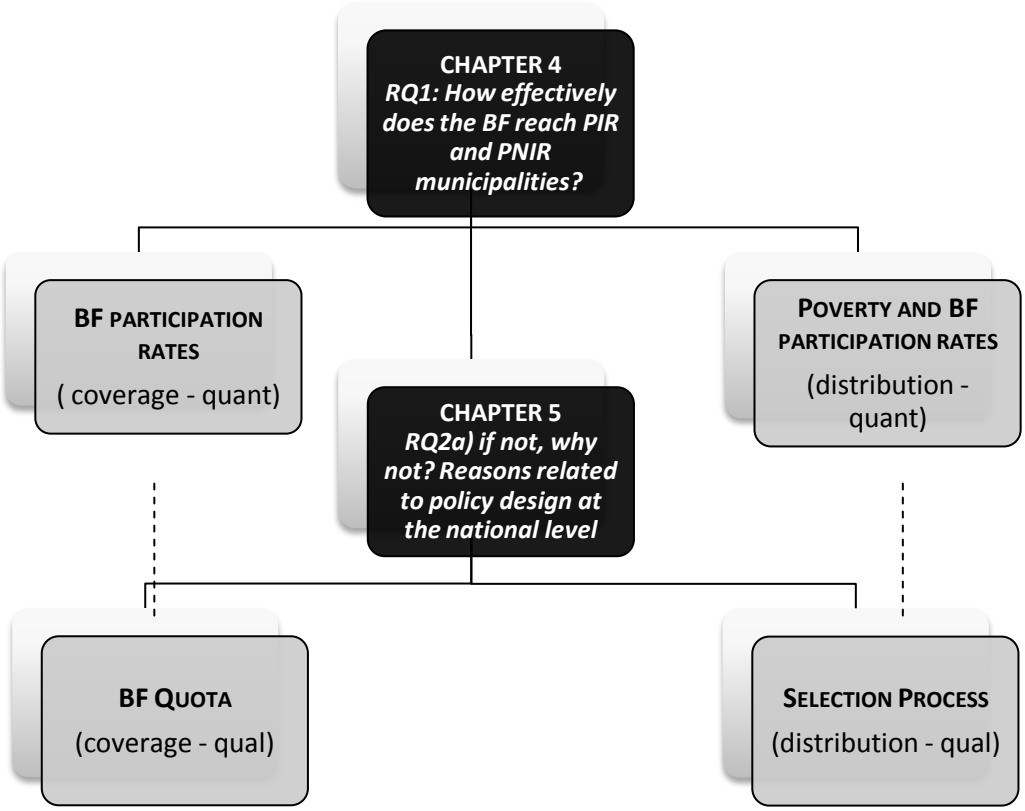
5 THE NATIONAL DESIGN: QUOTA ALLOCATION TO PIR AND PNIR MUNICIPALITIES AND SELECTION OF BENEFITS TO THE PERSISTENTLY POOR, 2004-2009

5.1 Introduction

In the previous chapter, I established that, although BF participation rates in PIR and PNIR municipalities are higher than the rural average, PIR municipalities have lower participation rates than PNIR municipalities. They also have lower BF benefit allocation per poverty levels than the national regression line, indicating non-take-up problems. Furthermore, the BF trends in PIR municipalities are worrisome as the BF participation rates of extremely poor PIR municipalities have deteriorated, moving from high to medium participation rates from 2004 to 2009. More remote PIR municipalities are consistently below the national regression line. The findings in Chapter 4 are important evidence that the BF benefit is not reaching some of the persistently poor whom it primarily intends to reach.

In this chapter, I start by investigating some of the possible reasons for these findings in PIR and PNIR municipalities. The main question I ask is (RQ2a): **"What are the reasons related to policy design at the national level that prevent the BF effectively reaching the rural poor in PIR and PNIR municipalities?"** Figure 28 below illustrates the conceptual links between this chapter and the previous one.

Figure 28: Conceptual links between Chapters 4 and 5



Source: author.

The national **BF quota** is referred to in the literature as a "target" or "goal", but it is treated as a "targeting issue", i.e. how the BF efficiently reaches the poor. In contrast, I treat the BF quota as a "cap" on the number of benefits, and investigate the question of the extent to which this capped benefit effectively maximise its reach to the persistently poor.

The national target of 11.2 million households was first established in 2004, revised in 2006, and increased in 2009 to 13 million, a figure it reached in 2011. In 2014, it reached 14.1 million households (MDS 2014). Although Brazil has reduced the number of people in poverty, as discussed in section 2.1.2, why has the BF target kept increasing?

The literature (Soares 2012a; Soares *et al.* 2010b) has pointed out that there is a disconnection between the number of potential eligible beneficiaries registered in *Cadastro*, and the number of potential beneficiaries estimated by PNAD. This

disconnection has created the "strange category of households: *eligible but not beneficiary*" (2012a p.6). Soares *et al.* (2010b) say that this difference is due to the difference between calculations of the BF target based on PNAD, and the BF inclusion criteria for households to receive the programme for two years. The cross-sectional PNAD target calculations do not follow the longitudinal operationalisation of a poverty line based on the rule that beneficiaries must be assessed every two years[88].

Soares *et al.* use the 2004, 2005, 2006 and 2007 Monthly Household Survey (PME)[89] to compare longitudinal and cross-sectional poverty estimates based on the PME and the PNAD respectively. The authors conclude that the BF 2009 target would be around 19 million households on the basis of the longitudinal PME, rather than 13 million, the figure based on the PNAD. Therefore, the differences between the estimates based on the longitudinal data collections, the *Cadastro* and the PME, and those based on the cross-sectional PNAD, cast doubt on the accuracy of the poverty estimates used for the BF. It also raises the question of whether policy makers can talk about a *universal coverage* that is based simply on fulfilling 100% of a questionable target, when there is evidence of beneficiaries who are eligible but who are not covered by the programme.

Surprisingly, it is not clear exactly how the PNAD was used to estimate municipality quotas. What are the implications of using the PNAD to allocate quotas for small municipalities? How was the expansion of the programme in 2004 and in 2009 decided? Were issues involving rural poverty or persistent poverty taken into consideration? I will address these questions in this chapter.

---

[88] In fact, there is no such legal requirement. The legislation says that families can stay in the programme if their income is below the eligibility threshold. If the family *per capita* income exceeds the eligibility cut-off point after a year on the programme, the family benefit can be cancelled. The two-year "rule" is based on the two-year legal requirement for updating the *Cadastro.* Families are only obliged to update their income profile every two years, resulting in a possible two-year stay in the programme. However, the fieldwork has demonstrated that some municipalities update their registration more frequently than every two years. Only in August 2010, *Portaria* No.617 created a so-called "permanence rule" whereby a household can stay in the programme for up to two years if they voluntarily inform the local municipality about income changes, even if their income goes above the eligibility threshold. However, if the information is a result of the local process of registration updates, then this rule does not apply.

[89] *Pesquisa Mensal de Emprego*: covers metropolitan areas of Brazil.

Similarly, there is little public discussion about the **selection process**. An in-depth analysis of how the legal prioritisation reflects competitive and mutually-exclusive claims of households is left unaddressed. Once again, the existence of households that are "eligible but not beneficiaries" throws doubt on the selection process. How were households selected from the pool of eligible households and in what order? Is this selection independent of the local quota or is it based on it?

Thus, I subdivide the analysis in two questions:

(i) Are the lower participation rates in PIR municipalities (as opposed to PNIR) a consequence of the way in which the BF national **quota** is calculated or allocated to small municipalities (section 5.2)?

(ii) How is the **selection process** conducted? Does the selection process prioritise the persistently poor (section 5.3)?

The two sections of this chapter, dealing with quota and selection, are inter-related. Given that there is a national quota that caps the number of households that can receive benefits, is it the case that PNIR municipalities (which are close to urban municipalities and may be comparatively well-equipped) receive more benefits at the expense of PIR municipalities (which are far from urban municipalities and less well-equipped)? Thus, in order to ensure that the programme is maximising its effectiveness in reaching PIR municipalities, it is important to consider questions about how the national quota is calculated, how it is distributed to municipalities, and how households are selected to receive benefits.

5.2 The BF quota: official poverty numbers and quota allocation

In 2003, the first BF national target of 11.2 million households was established using the 2001 PNAD (TCU 2006), with the aim of reaching this target within three years. In 2006, the quota was revised downwards to 11.1 million households using the 2004 PNAD. This revised target remained until 2008, with the important caveat that it was a "quota", i.e. new families, although eligible, could only enter the programme when the old ones had left.

The fact that a new family could enter the programme only when there was a vacancy – i.e. when another family had graduated from the programme or when it had had its benefit cancelled – should not be ignored. As previously stated, a quota based on estimating the number of poor using a cross-sectional survey such as the PNAD is questionable, potentially excluding eligible families. It is not surprising that the Government has had to increase the national quota since the programme started.

Soares (2012a) says that the total number of poor according to the various PNADs was 8.6 million and that the government decided to increase it to 11 million. How this increase was calculated is not detailed in his article. In addition, the author reports that from 2006 to 2008, the number of "eligible but not beneficiaries" were around 2 million households. Rocha (2011) calculates that in 2006, this number was 3.4 million households. Soares *et al.* (2010b) bring to the debate the question of the income volatility of the poor, which the authors recognise is higher in rural areas. Due to the backlog of eligible households, the federal government decided to increase the national quota to 12.9 million households in 2009. When I conducted my fieldwork in 2010, I interviewed several families who had been waiting for the benefit for several years before they got it that year.

From interviews I conducted with staff at the federal level, I was able to identify two implementation phases during the period analysed: (i) *the formulation of the BF and the expansion phases from 2004 to 2006*, and (ii) *the consolidation phase from 2006 to 2009*.

The BF set-up phase includes: the creation of the new Ministry of Social Development (MDS); the revamping of the *Cadastro*; the construction of dialogues between different ministries, MDS and CAIXA; the federal government's presentation of the BF as the flagship social-policy programme; the formalisation of the relationships between the BF ministry and others (*portarias interminiteriais*); and the formalisation of relationships with local municipalities (*termos de adesão*); and so forth.

The second phase, which started in 2006, involved: the implementation of an instrumentality to monitor conditionalities; federal government monitoring of the quality of the national and local *Cadastro*; and the establishment of the IGD (*Índice*

de Gestão Decentralizada), a financial incentive for local administrations. IGD is an index for calculating federal transfers to the municipalities based on their BF performance in relation to *Cadastro* quality and the monitoring of conditionalities. The index is based on (i) the proportion of valid registries[90] versus the local quota; (ii) the number of updated entries; and the fulfilment of (iii) education and (iv) health conditionalities.

This section is subdivided into four parts: the expansion of the programme from 2004 to 2006; the national quota calculation and the municipal allocation; considerations of persistent rural poverty in the policy design; and the issue of universal coverage.

The BF rapid expansion: 2004 to 2006

The BF did not start with an empty slate. It brought together four different programmes from various ministries into the newly formulated MDS. Therefore, there were already a number of beneficiaries previous to the BF, which were transferred to the BF. These beneficiaries were from small predominantly urban or semi-urban municipalities in the Northeast of Brazil[91].

Lindert *et al.* (2007) highlight the rapid expansion of the programme from 2003 to 2006, as one of the key features of the BF. The exponential expansion, as shown in Table 13 below, is due to the incorporation into the BF of beneficiaries from previous programmes during those early years. During the first phase, the BF target was comprised mostly of the beneficiaries of pre-BF programmes (*programas remanescentes*), who were located in the urban or semi-urban Northeast. Information from the MDS shows that, up to June 2006, only 39.8% of BF benefits were those given to new families (TCU 2006 p.258).

[90] The BF legislation distinguishes between valid registrations (*cadastros válidos*) and eligible registrations (*cadastros habilitados*). Valid registrations are completed household registration forms, which include documentary evidence of identification (national identity card, tax registration card (CPF), or electoral roll card). Eligible registrations are valid household registration forms that fit under the cut-off for the BF benefit.

[91] Information obtained from interviews az025 and az026.

Table 13: Yearly quotas and implementation of the BF

Year	% of the quota	Total BF households
2003	32%	3.6 million
2004	58%	6.5 million
2005	77%	8.7 million
2006	100%	11.1 million

Source: Reprinted from TCU (2006 p.266).

Furthermore, institutional arrangements were set up that integrated local administrations with the federal goals to implement and expand the programme. The BF works as a partnership between federal, state and local governments. Because of the levels of decentralisation in Brazil, established by the 1988 Constitution, the federal government created Joint Management Agreements (*Termos de Adesão*) among the different government levels, which assigned different BF functions to different administrative levels. This model of programme management is called "decentralised management" (*gestão descentralizada*) and it facilitated the expansion, as it clarified the roles of each entity.

Quota calculation and allocation

Calculations of the numbers of people in poverty depend on the choice of poverty lines and methods, a choice that reflects the complexity of the poverty concept. This is particularly important when selective benefits are nationally capped and are based on means tests. For the BF, the Brazilian government decided to base its estimates of poverty on the PNAD.

Estimates of poverty based solely on income, such as those relying on the PNAD, are far from perfect. Soares *et al.* (2010b) present evidence showing that estimations of the numbers of poor can vary depending on if they are measured based on cross-sectional or longitudinal. Given that the incomes of the poor are so volatile within and across years, estimating the numbers of the poor from cross-sectional surveys is not a very reliable method. Thus, determining the number of BF benefits needed using the PNAD is questionable.

Furthermore, the reliance on the PNAD to estimate the number of households in poverty calls for some methodological caveats. The first BF target in 2003 was based on the 2001 PNAD, but at that time, and up to 2004, the PNAD sampled only the urban areas in the North of Brazil. Thus, there is no information specific to the rural

areas, despite the fact that they are known to have high levels of poverty. Moreover, these estimates were surprisingly revised downwards in 2006, even though the 2004 PNAD was used.

PNAD is representative for Brazil in relation to macro-regions, states and overall urban and rural census sectors, but not for small municipalities (IBGE 2010a). These municipalities, called non-representative municipalities, are aggregated according to geographical proximity so that they are stratified according to population size. In addition, there is the issue of estimating poverty numbers using population projections (Osorio *et al.* 2011b). Projections for small rural areas represent a challenge for the Brazilian Bureau of Statistics (IBGE & UNFPA 2006).

There is, therefore, a gap in the literature on how the MDS used the PNAD estimates to allocate the national quota to small rural municipalities from 2004 to 2010. Interviewees reported that how the national quota was allocated to the local municipalities was decided by MDS (SENARC), IPEA and IBGE (interviews az017, az018, az021, az025). A first attempt to address this gap, based on interviews with key agents of the BF design, yielded interesting preliminary findings.

First, there is the initial national quota. Interviewees reported that the 2000 Census was already outdated in 2004 when the BF started, so the PNAD was the best methodological option to calculate updated poverty estimates. In 2006, MDS reassessed their local quota allocations, basing them on the incomes of the poorest deciles as shown in the 2001 and 2004 PNADs. These calculations were straightforward: given a national poverty line, PNAD information is used to estimate how many households are below such a poverty line nationally. However, as I stated previously, using the PNAD to estimate poverty has methodological implications for the distribution of quotas to small rural municipalities, causing potential bias in the initial and subsequent calculations, as further detailed below.

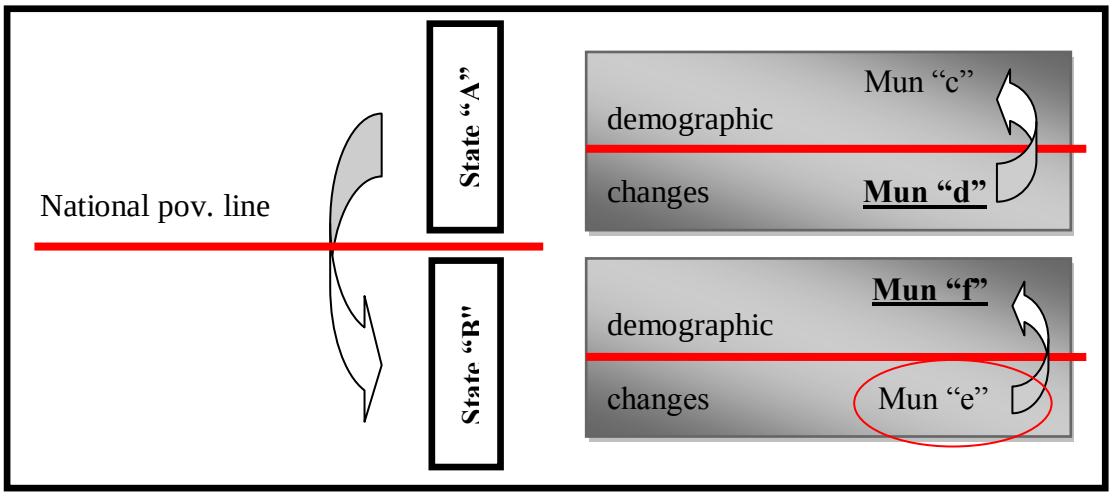
After the poverty has been estimated nationally, the national quota is allocated to the states according to these estimated poverty levels. Given that PNAD is representative on the state level, this allocation is fairly accurate. The national quota is distributed to the states according to each state's incidence of poverty. For example (Figure 29), if the incomes of the poorest deciles of a type "A" state were higher than the incomes

of the poorest deciles of a type "B" state in relation to the national poverty line, then state "A" would receive a lesser proportion of the national quota than state "B".

Finally, the state quota is distributed to the municipalities (the local quota) according to changes in municipality demographics, i.e. growth or decline in population numbers, although the exact dataset or datasets used to calculate these changes were left unanswered by interviewees. For example, considering the state "A" and "B" above, municipalities whose population growth was above the state average would be allocated more quotas than those whose demographic changes were below the state average.

As correctly pointed by one interviewee, and illustrated in Figure 29, there is a conflict between these last two steps in the allocation method. Municipalities whose demographic changes were below the state average (municipality "d"), and who were located in a type "A" state, would lose quotas twice. Similarly, municipalities whose demographic changes were above the state average (municipality "f"), and who were located in a type "B" state, would gain quotas twice.

Figure 29: Distribution of national quota to local municipalities



Source: author, based on interviews

This method of allocation is based on two assumptions. First, it assumes that there is an equitable distribution of poverty between municipalities within each state. This is clearly not the case, as demonstrated by the differences in the incidence of poverty between the PIR and the PNIR municipalities (see Map 6 and Map 7 in pages 95-96). Second, distributing local quotas, not according to which municipality is poorer but

according to demographic growth, assumes that poverty trends within a state follow demographic changes. Both assumptions may have been necessary to operationalise the allocation of local quotas, but they are, nonetheless, difficult to justify.

These assumptions give rise to several issues for PIR and PNIR municipalities. Given that PIR and PNIR municipalities are concentrated in the Northeast of Brazil, they are in states with poverty levels above the national average and, therefore, receive higher than average BF allocations. However, PIR and PNIR municipalities have higher poverty levels than other municipalities in their own state. Given that there is a documented trend for the past three decades of higher population increases in medium-sized municipalities (IBGE 2011b), PIR would most likely be in the same position as municipality "e" in Figure 29 losing to other municipalities the quotas they won initially. Thus, one important finding is the possibility that some PIR municipalities had their quota allocation reduced.

I mentioned the possibility of quota reductions only in relation to PIR municipalities because the population dynamics are different in PNIR municipalities. With the exception of the state of Bahia, the Northeast consists of dynamic areas of growth in traditional medium-sized urban municipalities(IBGE 2011b p.44). Thus, given the location of PNIR municipalities, I can speculate that they would have had population increases due to their linkages with dynamic intermediary sub-regional urban municipalities, and hence would have received increased quota allocations.

The influence of location and municipal capacity to qualify for the local quota is acknowledged by federal staff:

> Quite often, very poor municipalities have low coverage because they do not have the technical capacity to register households at the *Cadastro* ... This is slowly being improved upon (az025).
>
> When I looked at municipalities and saw some of them with coverage of 100%, 101%, I think that was first [a question of] municipality management, *Cadastro* management, … **municipalities that visited families more efficiently in the beginning of the programme, they achieved higher coverage, let's say that** (emphasis added) (az024).

The above statements underline two problems facing poor rural municipalities. First, they reinforce the finding that lower participation rates or lower quotas in PIR municipalities, do not necessarily mean that there are fewer poor people. Second,

some municipalities may not have the human and financial resources to ensure the coverage of isolated rural villages. This hypothesis is further tested in Chapter 6.

Thus the logic of the quota distribution does not favour PIR municipalities, for the following reasons:

- The distribution of local quotas does not take into consideration the differences in the severity of poverty within states.
- PIR municipalities may have their quota allocation reduced, despite high poverty levels, because their population numbers fall or fail to increase.
- Because PIR municipalities are likely to have poorer implementation capacity, they may have lost out to municipalities with better capacity that were able to register potential beneficiaries quickly – further investigated in Chapter 6.
- Lastly, isolated rural villages in PIR municipalities may not be as quickly registered as the poor living in urban areas of PIR municipalities, due to lower municipal capacity – also investigated in Chapter 6.

From 2006 to 2009/10, there was no increase in the national quota. For the 2009/10 increase, interviewees reported that a new methodology to allocate the benefits was put in place. This methodology used the 2006 PNAD, the 2000 Census and small area estimation techniques (MoPI) – the same methodology I am using for this thesis.

Nonetheless, problems with the quota estimation are likely to persist, given (i) that benefits are capped nationally due to budgetary restrictions, (ii) that PNAD is still used to derive national poverty estimations, (iii) that there are still problems with the way local quotas are allocated; and (iv) that population migration is constantly happening. This will result in ongoing operational difficulties and the need for frequent revisions of the estimations:

> We have the estimation, don't we? Because the municipality works with IBGE estimates, so they know what they have but we have some difficulties because some municipalities [say] 'I don't have all of this quantity that was estimated' or 'I need more than what is being given to me'. Recently, we had a revision of the estimations (az017).

Considerations involving PIR and PNIR municipalities in policy design

As previously documented, the World Bank clearly recommended in 2004 that the overhauling of the *Cadastro* should involve special attention being paid to the location and poverty density of rural areas.

> **Component 2: Strengthening the System for Identifying the Target Population (US$3.7 million in project costs including contingencies)** … While the construction of the *Cadastro Único* sought to integrate household registries across the (previous) multiple programs in a very short period of time, there are several aspects of the system that could be improved. To do this, Component 2 of the proposed project will support activities to strengthen the system for identifying the target population of the BFP [*Bolsa Família* Programme] and overhaul the *Cadastro Único* system in several key areas: … (b) revising the eligibility criteria for the BFP and the Cadastro questionnaire and data collection strategy, **taking into account different local realities reflecting urban vs. rural settings (including population and poverty density) and diverse cultural, ethnic and racial characteristics of the populations** (emphasis added) (World Bank 2004a p.2).

This recommendation is in agreement with other research on rural poverty in Brazil (IFAD 2011; World Bank 2003). But currently, the process of allocating quotas to municipalities gives no specific consideration to the type of municipality (rural or urban). This was also confirmed in several interviews:

> So, look, in terms of rural or urban, there was never this differentiation, for example, I do not prioritise rural, I don't, and I never will, I think it will never happen, I believe it will never have this differentiation, not this rule of prioritisation. (az021)

> So, I would not say that the BF had a clear rural and urban delimitation since the beginning, exactly because it had a trajectory of building the programme based on an already defined clientele, a public that was a already mapped by previous programmes … The BF cut-off is income; it is not rural-urban location. (az026)

Achieving universal coverage in the long-term?

Despite the methodological limitations of deriving poverty estimates from a cross-sectional survey, Lindert *et al.* (2007 p.72) can still say that "[the] Bolsa Família has reached coverage targets that represent universal coverage of the poor". The sheer size of the programme in terms of the number of households it reaches, or the fact

that it covers all 5,565 municipalities of Brazil, is often confused with universal coverage.

Many federal level administrators do recognise the limitations of the quota allocations, but argue that coverage will improve with time and a better understanding of the programme on the part of both local administrations and households. Local administrations should be well-equipped to register poor beneficiaries after the initial years and after federal transfers based on their IGD. Potential beneficiaries should have knowledge of the programme by now and would have registered for the benefit. As one of the interviewees said:

> But now we are in a second phase and I realise that with the extension of the BF, at least in the conceptual and theoretical point of view, we can achieve, with this volume of beneficiaries after the expansion, in theory, you would cover everyone, do you understand? (az024).

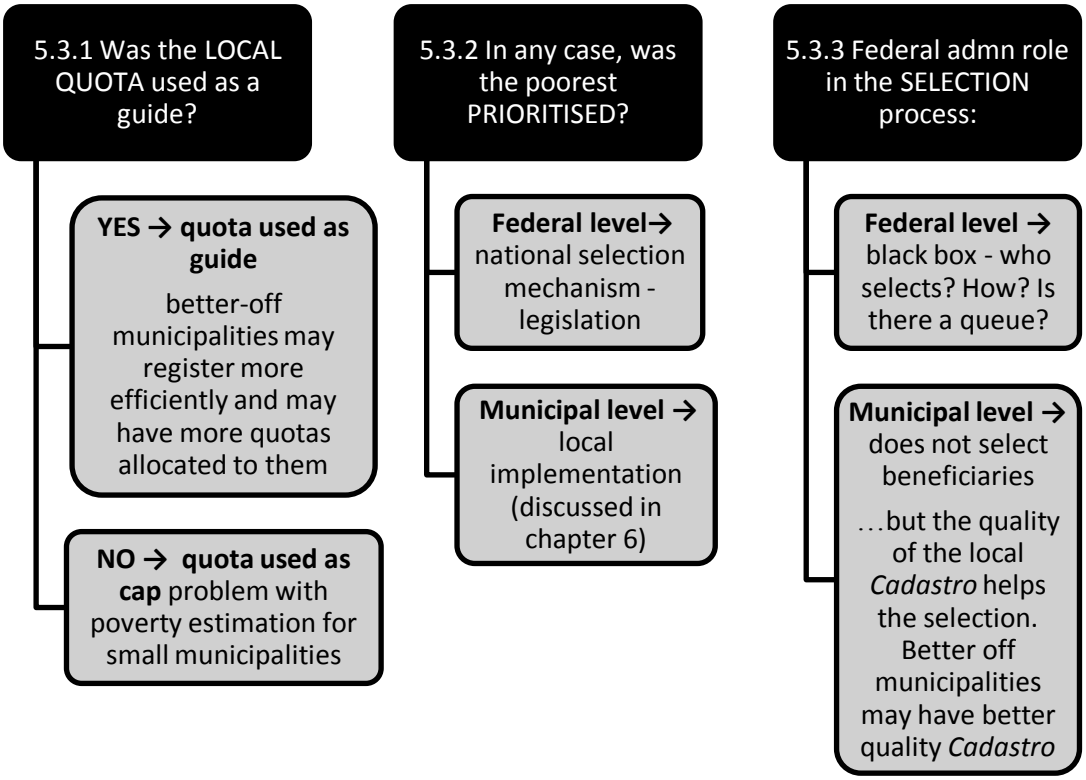
But this argument is fallacious on several levels. More coverage does not necessarily mean more targeting inclusion rates. More knowledge of the benefit does not automatically translate into more registrations or updated registries. Other reasons for lower registrations, such as system problems and measurement errors, are further explored in the next section and in Chapter 8.

5.3 The selection "black box": local quota, prioritisation and selection

How to ensure that the poorest of the poor, the persistently poor, receive the benefit? Even if there are problems with the allocation of the national quota to municipalities, if there are systems in place ensuring that the poorest in a given location receive the benefit, issues concerning the total number of benefits may become secondary.

The selection mechanism, however, is perceived by local administrators and the population as a "black box". To start the analysis, I subdivide this section into three parts (Figure 30): first I ask whether the local quota was used as a cap or only as a guide for benefit allocation; then I investigate whether the persistently poor were prioritised at the federal level; lastly, I analyse in detail the selection process, which also happens at the federal level.

Figure 30: Local quota, prioritisation and selection



Source: author.

5.3.1 The local quota: a cap or a guide?

Interviewees had mixed views about the quota usage: sometimes it was understood as a cap, at other times it was used only as a guide. The cap on the local benefits was mentioned in interviews with several federal administration staff involved in the BF programme.

> In such a municipality, let us suppose there are 100 thousand families, we can, then [based on the quota], include [only] another 50 (az023).
>
> there are 15 new benefit for this municipality, always following the estimates, which is our **guide**, as well as the financial information (az017 – emphasis added).

The apparent confusion in the latter statement is due to the fact that the BF has a national cap, which must be respected due to budgetary allocations, but no specific regional target. As a TCU report said:

> [TCU] was not able to find procedures that monitored the attainment of regional targets, but only procedures that monitored attainment of the national target of 11.1 million families (2006 p.278).

The same report shows that in 2006 the difference in BF coverage varied from 268% in the municipality of Vera in the state of Mato Grosso, to 8.46% in the municipality of Itaubal in the state of Amapá (TCU 2006 p.247). This percentage refers to the local quota i.e. families receiving the BF as a proportion of the number of estimated poor families. The report shows unequal distribution of benefits within both municipalities and states:

> *Bolsa Família* expansion by geographical region was not carried out uniformly. [This is due] to the concession of benefits above the estimated number of poor families in various states and municipalities of Brazil, while in other states and municipalities the coverage was below the estimated number (TCU p.277).

SENARC emphatically stated in its reply to TCU that the local quota is not a cap:

> SENARC understands that poverty estimates should not be understood as a cap on benefits concession, once these estimates are not considered absolute (TCU 2006 p.282).

Other research has found that the local quota is used merely as a guide. Comparing the number of benefits (2006 *Cadastro*[92]) with the local quota (estimated from PNAD 2001), Bastagli (2008 pp.120,121) shows that the number of benefits is higher than the quota, resulting in an "over-shooting" of the target.

When I asked a key interviewee who took part in the BF policy design about the reasons behind the local quota, the interviewee reported:

> we carry out a recurrent update of the household information so that we can follow-up families. The quotas have this rationale … and a little bit to help in the targeting, right? Since we know that there are 11 million households below the eligibility criteria, how are they spatially distributed? So that we would not find a situation in which a municipality has 200% of coverage and another one 50%. Therefore, we created a certain restriction so that municipalities would effectively search who are the poor households in their geographical area, given a certain number of families. Otherwise, they could do a less rigorous income analysis. Thus, that was the idea, to try to distribute that national number to the municipalities (az025).

[92] Technically, the author uses the information from *Folha*, which is the *Cadastro* administrative record on cash transfer payments.

Using the local quota as a guide seems an adequate compromise given the potential difficulties of estimating the number of poor households in small rural municipalities, such as PIR and PNIR. Nonetheless, such a use confirms my previous hypothesis that some municipalities may increase the number of their benefits at the expense of others ("taking the place of"). Thus, this question of "over-shooting" the local quota needs to be addressed by monitoring the local quota for the prioritisation of the poorest and the selection of beneficiaries.

5.3.2 Prioritisation of the persistently poor

Considering that the national quota is a cap and the local quota is a guide, one question remains **– how to ensure that the poorest households are prioritised?**

Interviewees reported that the prioritisation of the poorest is ensured by having a good local *Cadastro*. The federal government, therefore, set up several procedures to ensure that local *Cadastros* were regularly and correctly updated. There are several cross-checks conducted between different administrative databases. Some are automatic; others are intentionally carried out. *Cadastro* automatically warns the local *Cadastro* technician when there is contradictory information entered in different sections of the form, such as declared income and declared expenditures. *Cadastro* also prompts when information is lacking or invalid. CAIXA runs other checks, such as name, identification documents, filiation checks, *etc*. The federal government cross-checks *Cadastro* information with other administrative databases, such as the Annual Social Information Database (RAIS[93]) and the Vital Records (CNF[94]). RAIS has information on income through formal employment, and CNF records births and deaths nationally.

Municipalities are also subjected to internal and external audits from the TCU and the Office of the Controller General of Accounts (CGU[95]). Along with the other BF requirements, this reinforces the need to have an updated and a good quality *Cadastro.*

Other tools to ensure the quality of local *Cadastro* are:

[93] *Relação Anual de Informações Sociais.*
[94] *Cadastro Nacional de Falecidos.*
[95] *Controladoria Geral da União.*

- a recommendation that the *Cadastro* entries of 20% of households should be made through households visits (*Portaria No376, 16/10/2008*, *Portaria No177, 16/06/2011*);
- "active search"[96], i.e. local municipalities actively reaching out to the poorest and registering them *in loco;*
- several tools for communication between federal and local municipalities; and
- the IGD financial transfers. Two of the four IGD indicators, listed in section 5.2, refer to the quality of the *Cadastro*, namely the number of registries updated within the past two years, and what proportion of the local quota the updated registries are.

The World Bank recommended that geographical targeting should be carried out while registering families at the *Cadastro* (de la Brière & Lindert 2005). Thus, areas with high poverty may justify registration in loco; whereas in areas with low poverty an on-demand application may be more suitable. However, municipalities are autonomous entities, so it is up to them to decide how *Cadastro* registration will be conducted in their own territories, and whether they will use geographical targeting.

Even when the local *Cadastro* is regularly updated and reflects the actual situation of the poorest, the policy design requires the prioritisation to be monitored at the national level in cases of competing claims. This topic is indeed a "black box". Even senior BF researchers like Soares (2012a) are confused about prioritisation, leading him to state, "What is weird is that Bolsa Família has eligibility criteria and [but] not ordering criteria" (p.6). However, the BF does have ordering criteria, as described below.

The BF legislation first categorises households according to their social vulnerability levels (*Portaria GM/MDS 341, 7/10/2008,* art. 7): (i) households with child labour; (ii) households with forced work (modern day slavery); (iii) *quilombolas* peoples; (iv) indigenous peoples; (v) households living in states or municipalities with federal agreements concerning specific policies for BF beneficiaries (*Decreto 5209,*

[96] "Active search" means that the administration does not wait for potential beneficiaries to come to registration points at the local town. The local government actively goes out and finds the most vulnerable families and registers them at the *Cadastro.* This action is taken even further by the policy that has succeeded the *Bolsa Família* programme, called *Brasil Sem Miséria.*

17/09/2004, art. 12); and (vi) households that belonged to programmes prior to the BF (*programas remanescentes*).

After MDS defines the number of families that will join the BF in a given month, there are three levels of prioritisation during the selection process. The highest priority is given to families in the social vulnerability categories listed in article 7 of *Portaria GM/MDS 341, 7/10/2008*. The next highest priority is given to municipalities with coverage lower than the calculated local quota (art. 8, §1). The final level of priority is on the household level (art. 9). The "concession of the benefit" is given first to (i) families with the lowest household income, then to (ii) families with the largest number of children from 0-17 years old (*Portaria GM/MDS 341, 7/10/2008,* arts.8, 9).

There are several points to be made about these prioritisations. The use of computers is a growing trend, even in developed countries, such as the United Kingdom "digital by default" universal credit policy (Dwyer & Wright 2014; Seddon & O'Donovan 2013; Spicker 2012). Today's British academics mirror Titmuss' concern about what he called the "computermania", and the unavoidable problems of moral values and equity imposed by selective policies (Titmuss 1987 p.137). The BF selection process is one example of this unavoidable dilemma: how can one make a case that an individual in extreme poverty should be given priority over a poor family with a large number of children? Why should indigenous poor families be given priority over non-indigenous extremely poor families?

Another example concerns prioritisation according to geographical location and coverage in relation to the local quota. Although the quota is used only as a guide, and does not dictate the final number of benefits given to a municipality, its use as a prioritisation mechanism means that how it is calculated is extremely important. Even though it is very difficult to be certain when small municipalities, like PIR and PNIR, have had their local quotas under- or over-estimated, it is still the case that, in the event of competing claims of households with same level of income poverty and children, the benefit will go to the household living in the area with lower BF coverage.

Another important point to make is that new benefits are allocated to municipalities with low coverage, only then, they will be allocated according to lowest income per capita and highest number of children. This could mean that more deprived households lose out to less deprived households. If an extreme poor household "a" lives in a municipality whose quota has been reached and the household is not in one of the categories accorded top priority, this household may not receive the benefit. However, another household "b", which may not be as poor as household "a", may receive the benefit because they happen to live in a municipality with some empty places.

It is important to note that, on the evidence of the legislation and the interviews, there is no "virtual" queue for the allocation of new benefit. As well, it seems that municipal allowances for the inclusion of families change from month to month, with each new MDS monthly allocation of benefits to municipalities.

Another consideration is the prioritisation of beneficiaries of pre-BF programmes (*programas remanescentes*). This means that the beneficiaries of previous programmes were the first beneficiaries of the BF, if they met the BF eligibility criteria. This is a very important issue for the purpose of this thesis, because two out of the four programmes were geographically targeted. The *Bolsa Alimentação* (Food Voucher, *Medida Provisória No. 2206-1, 06/09/2001)* and the *Bolsa Escola* (School Grant, *Lei No. 10.219, 11/04/2001*) gave priority to the 14 States with the lowest Human Development Index.

Tavares *et al.* (2009) suggested that the north-eastern states enjoyed better targeting because of better identification of the poor by local administrations. Local officials can more easily identify and target the eligible population because the poverty gap in the Northeast is double the national poverty gap. The authors also believe that the severity of poverty can create a strong incentive to register with the *Cadastro*. However, I would suggest that, considering that the BF list of beneficiaries was based on other programmes, and that those other programmes focused on the urban and semi-urban Northeast, targeting in the Northeast seems to be a consequence of the prioritisation rule (*Portaria GM/MDS 341, 7/10/2008*), rather than of better identification of the poor.

Another point to be considered is that the prioritisation process listed above does not detail how to resolve complex cases of competing claims. For example: how would the selection system choose between a *quilombola* family living in a high-coverage geographical area, and a persistently poor family with a larger number of children living in low-coverage rural geographical area?

There is, lastly, the process called "indication" (az017, az021), whereby particular families "jump in front of the queue". These are the families who fall within the categories of vulnerability listed in article 7 cited above (*Portaria GM/MDS 341, 7/10/2008*), and their cases are decided judicially.

> Now, there is another process, which is called 'indication', what does 'indication' mean? It means that these families, they receive BF benefits even when there is no quota left (az021).

This reinforces the finding that article 7 takes precedence over higher levels of rural poverty such as those faced by the persistently poor in PIR and PNIR municipalities. Although it is sensible to address the historic social debt that Brazil has to the indigenous and the *quilombolas* population, it may not be adequate to do this using the BF policy and at the expense of other disadvantaged families.

This sub-section has shown that, because of the priorities listed in the BF policy design, the selection process does not favour the persistently poor living in PIR municipalities. Those priorities are, according to *Portaria GM/MDS 341, 7/10/2008*, in order: (i) "indication" and article 7 categories, which includes beneficiaries of pre-BF programmes, mainly located in urban and semi-urban municipalities; (ii) municipalities with low coverage (art. 8 §1); and finally (iii) persistently poor households assessed for benefits on their income levels and number of children (art. 9).

Based on the above, one last and important remark to make in this section is to note that persistently poor households are competing for the benefit nationally. When a household leaves the programme, the vacancy does not remain in the municipality where the former beneficiary lived. Benefits are allocated first to areas with lower national coverage.

5.3.3 The role of the federal administration in the selection of the beneficiaries

The selection of beneficiaries is a delicate issue in Brazil. In a country with a history of corruption scandals, nepotism and political favouritism, the selection of beneficiaries is intended to be protected from political or other external influence by computerised algorithms and objective indicators, hence its appearance as something of a "black box". Interviewees coined a couple of terms, "political-proofing" (*blindagem política*) and "bureaucratic insulation", to describe attempts to carry out this intention during the first phase of the BF and the initial years of exponential expansion.

> so, you will never see, not at least until today, a mayor saying that he came to Brasília and used his/her political influence to negotiate an increase in the local quota for his/her municipality … you won't see this … we do not receive lists of people nominated by deputies, senators, or whoever this person may be … unless the Judicial powers determine so … thus, there was, perhaps you could call it the BF 'bureaucratic insulation', which was fundamental. This means, the president guarantees the priority in resources allocation, the ministry reinforces this and guarantees isolation and political protection and, here, we have professionals working and, all of this together is what makes the programme successful for me (az019).

However, what the above statement also says is that there was a "selective" political-proofing. Although there was no political influence in the day-to-day activities of programme execution, the overarching vision of the federal government, and even the personal role of President Lula, is very clearly acknowledged. So the BF is likely to have had, during its policy design, (i) a top-down political influence on policy design, including several federal-level state bureaucrats; and (ii) a political-proofing from bottom-up demands from local government and administrators and, perhaps, even from local community representatives.

It is important to discuss the circumstances in which the BF was consolidated, because they explain why the details of the selection process are not openly discussed, and more importantly, why the selection is centralised, computerised and de-personalised. The local administration does not play any part in the selection of the beneficiaries. Their responsibility is to keep an updated and truthful registry of the local households, preferably including the poorest whom they have identified

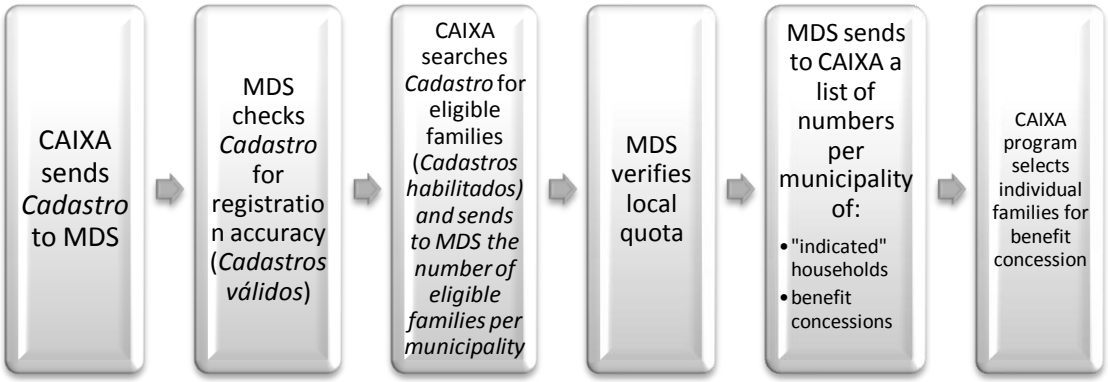
through an active search. My interviews with local administrators showed that they do not understand how the selections are made.

> I really do not know how to give you this information, how they select the beneficiaries. Because the selection, according to the law and everything else, is for the most vulnerable families, right? However, I think that vulnerability has to be looked upon as a whole, in the number of people in the household, right? Sometimes, we see a couple, recently married, that was registered and they got their benefit and then here comes a mother with five children, no husband, nothing, she doesn't have the benefit (n006).

It is interesting to note that although this local administration employee works with the BF, s/he does not know about the prioritisation rule.

The selection workflow, pictured below, was described in interviews as an interaction between the MDS and CAIXA.

Figure 31: Selection workflow



Source: author based on interviews.

It is important to clarify that communication between CAIXA and MDS about the selection process refers to quantities and not to individual households. After the MDS tells CAIXA the number of spots available locally (the local quota), CAIXA's software runs an algorithm that selects families according to the prioritisation criteria (described in the previous sub-section). Thus, it is impossible for either the federal government or the local municipality to say when a household will receive the benefit.

> No, we do not have this visibility to know when a household will receive the benefit; neither has the municipality, nor the family, nor us. Why is that so? Because, it is a matter of a complete unbiased decision, we do not choose the

> benefit for family A or B, but there are systematic processes that obey the rules of the *Portaria* [GM/MDS 341, 7/10/2008] (az017).

The issue of "indication" of families is triangulated using the interviews between CAIXA and MDS. CAIXA says that they receive two lists from MDS: one containing the external target audience ("indication") listed in article 7; and the other one, the number of new benefits per municipality.

The federal government, nonetheless, does not ignore complaints from local municipalities about the gaps in the selection process.

> but this process of declaring families eligible (*habilitação*) is very grey because you see we receive several official letters from municipalities asking why families are not being declared eligible and why they do not receive the benefit as there are still local quota available. In this case we have two causes, the first is like you also have the problem within the local administration, they include the family and they believe that they do not need to do anything else with the registry data for that family. So yes, in fact, we are not including in the programme a family whose registry is not being updated for 3,4,5 years. No, we are not. But at the same time there is something else, which is the following. The municipality is conducting several updates in their local *Cadastro* and these updates are not necessarily being reflected for us here at MDS, so some families are not being considered eligible for the programme (az021).

The above extract shows two sources of problems in the selection of families and the granting of benefits. First, there is the possibility that the information in the local *Cadastro* is outdated. Second, there is the possibility of system error that prevents the MDS from receiving the most updated list of beneficiaries. The case studies presented in Chapter 6 consistently showed the difficulties in sending and receiving the *Cadastro* data. This is most concerning as it means that there are PIR and PNIR municipalities with local *Cadastros* that are not copied into the national database, potentially leaving the persistently poor in rural poor municipalities without benefits.

One possibility that this interviewee does not acknowledge outright but which can be inferred, is the implication of the indication process for the national quota. Given that the indication process takes priority, these could be benefits that otherwise could be given to municipalities with quotas still filled.

Finally, there is a procedural problem that could result in benefits not being distributed to the poorest. Let us suppose that family "a" is the poorest family at the

Cadastro for a given month, and as such, they receive the benefit. Once the family has the benefit, its eligibility is measured against the poverty line. This does not necessarily indicate that the beneficiary family is still the poorest. Other families could have registered at the *Cadastro* with lower incomes that family "a". Given that income-poverty is highly volatile, it is, therefore, difficult to guarantee that the pool of individuals selected over time is the same as the pool of the poorest households.

In sum:

(i) Are the lower participation rates in PIR municipalities a result of the way in which the BF national quota is calculated, and how it is allocated to small municipalities? The analysis suggests that this is so.

- The national quota is used as a cap and the estimates leave eligible households out of the programme due to lack of places.
- The national quota is allocated to municipalities without any consideration of different levels of poverty within states, and poverty is worse in PIR and PNIR municipalities.
- There are no geographical priorities for allocating the state quota to poor rural municipalities like PIR and PNIR.
- PIR municipalities may have lost their quota allocation due to lower population growth, despite having higher poverty levels, with the result that their participation rates fall within the medium-range group.
- The local quota is used only as a guide, so municipalities with better implementation capacity could have taken places that should have gone to the worst-off municipalities, such as PIR and PNIR municipalities (implementation capacity is further investigated in Chapter 6).
- Thus, the analysis suggests that PIR municipalities may have had (i) a local quota lower than it would have been if intra-state poverty levels had been considered, and/or (ii) their BF benefits reduced in favour of other municipalities because of their lower implementation capacity. Either or both of these effects could be behind the medium participation rates found in PIR municipalities.

(ii) Does the selection process give priority to the persistently poor, such as those found in PIR and PNIR municipalities? The analysis suggests not.

- Prioritisation of the poorest depends on the quality of the local *Cadastro,* which also reflects the implementation capacity of the municipality.
- The prioritisation process does not favour the persistently poor in PIR and PNIR municipalities. There is no specific criterion for benefit allocation that gives priority to persistent poverty. Instead, the policy design gives priority to indication, categories of social vulnerability, pre-BF programmes (article 7), and areas with low geographical coverage, before assessing households on their income and number of children.
- The persistently poor are only considered for programme inclusion after its geographical area has been categorised as low coverage. So neither the level of poverty found in PIR or PNIR municipalities, nor the level of poverty found in households, exerts priority in benefit allocation.
- In the interviews, it was suggested that it is quite possible to have municipalities with quota numbers available, and eligible households without benefits.
- Thus, given the prioritisation mechanism and the policy design, it is difficult to ascertain whether the selected beneficiaries are indeed the poorest of the poor.

5.4 Conclusion

This analysis of the RQ2a has suggested that the calculation of the national quota, the process of allocating the local quota, the prioritisation of households and the selection of the families may not maximise the effectiveness of the BF. The policy design does not give priority to the persistently poor living in PIR and PNIR municipalities. The quota allocation and the selection process may be behind the fact that PIR municipalities fall into a medium participation-rate category (rather than high participation). It may also be the case that their benefit allocation is reduced by the fact that other municipalities have better implementation capacities, e.g. human resources, infrastructure, roads and transport.

This thesis asks for careful consideration of benefit allocation to PIR and PNIR municipalities and the persistently poor. The chapter shows the complexity of applying national poverty estimates based on the PNAD income estimates, to PIR and PNIR municipalities. Policy-makers must consider alternative ways to allocate the national quota to small municipalities, including poverty estimates based on indicators other than income measurements only. I believe that multidimensional indices have a better potential to capture the deprivation aspects of the lives of the persistently poor than those based only on income.

The analysis also details the complexities involved in means testing, selectivity and the use of computerised solutions to allocate benefits. The government opted to de-personalise services in order to avoid clientelism and historic levels of political favouritism, but this has been at the cost of excluding eligible beneficiaries. As well, computerised solutions, as demonstrated by this chapter, hide other moral choices and equity concerns that are still problematic, even though they have been de-politicised.

The detailed analysis of the prioritisation mechanism in the policy design shows the need for a radical transformation of the BF benefit into a truly universal coverage programme. This would eliminate the category of "eligible but not beneficiary". It would also avoid political favouritism and decisions based on moralistic assumptions. It would maximise the effectiveness of the BF by ensuring that those who are eligible receive the programme.

The fact that some of the rural poor in PIR or PNIR municipalities are receiving fewer opportunities to access the BF is of great concern. For the persistently poor, the BF is an important social assistance benefit in areas where isolation and deprivation in all levels of life abound, and it is the only income support programme offered to able-bodied working-age population.

Lastly, this chapter highlights how local implementation can influence the BF to reach the persistently poor in rural effectively. As stated by Soares *et al.* (2010b p.4):

> Quotas, by imposing limits, also impose costs, thus forcing mayors to select only the eligible. This argument, of course, presupposes that the poor or those acting for them are able to muster the necessary social control mechanisms at the local level. It is a very questionable assumption and there is no empirical evidence that this in fact happens.

Thus, this is what I turn to next. I focus the discussion of the next chapter on municipal-level analysis, followed by chapters on the household-level analysis.

6 THE ROLE OF LOCAL IMPLEMENTATION IN PIR AND PNIR MUNICIPALITIES IN EFFECTIVELY REACHING THE PERSISTENTLY POOR, THE LOCAL ADMINISTRATION STAFF PERSPECTIVE

6.1 Introduction

The previous chapter highlighted the key role of local administration in ensuring that the persistently poor are effectively registered, keeping the Cadastro up to date, conducting active searches in remote villages, and correcting system errors promptly. An investigation of how PIR and PNIR municipalities implement the BF, from the point of view of the local administration staff, will add to the previous findings on possible reasons for the lower participation rates and the worse allocation of BF benefits in PIR municipalities.

The central question of this chapter relates to RQ2b, "How does the local implementation influence the way that the BF effectively reaches the rural poor in PIR and PNIR municipalities?" To answer this question, I focus on two sub-questions:

(i) Section 6.3: How does remoteness influence the local administration infrastructure, and what impact does that have on BF participation rates?

(ii) Section 6.4: How does the remoteness of the rural village influence the local implementation, and what impact does that have on BF participation rates? And does the local administration give priority to the poorest during the BF implementation?

Although no study has analysed how remoteness affects the BF implementation, there are some general findings on BF implementation at the municipal level.

Magalhães *et al.* (2007) examined the BF implementation in the early stages of the programme. By comparing two case studies in Rio de Janeiro in 2004/2005, the authors observed that at that time there was not much knowledge of the programme; neither was there much training or coordination. This resulted in inadequate monitoring of conditionalities and even failures to registered potential beneficiaries. The authors highlighted the fact that, in municipalities which lacked a tradition of

participatory representation, the role of the BF social council (ICS)[97] in monitoring the BF was severely limited. This was compounded by the lack of a clear understanding of the BF social council's role. Some of these problems are still present in the poor rural municipalities I researched, as explained in section 6.4.

Bastagli (2008) examined the implementation of the BF in 2006 in four municipalities of the state of *Minas Gerais*. The author found that, in the two poorest municipalities, there was only one registration access point at the local town. This, the author said, "may pose a disadvantage for people residing at the outskirts of the town" (p.135). Poor municipalities struggle to get sufficient household visits, as well as being faced with infrequent social council meetings and IT and system problems.

The Brazilian Court of Audit (TCU) conducted several audits of the BF programme and the *Cadastro*. The 2003 audit of the *Cadastro*, pre-BF implementation, identified areas where the central administration needed to focus, if programmes like the BF were to be implemented. Important recommendations of that audit that are relevant to this research relate to regular updates of the *Cadastro*, training of local administrative staff, and the registration of vulnerable families in locations that are hard to reach. The report said that logistical and technical support should be given to local staff in accordance with the size of the municipality, and its demographic and technological diversity (TCU 2003).

A subsequent TCU report (2009b), covering the years 2005 to 2009, shows an overall improvement from the first BF audit carried out in 2004 in terms of monitoring of conditionalities, programme information, distribution of benefits cards, online training, *etc*. However, there is still concern over the lack of training for the social council. My case studies also observed recurrent problems with the ICS municipal access to information, which affects *Cadastro* quality.

Although these studies were conducted in the beginning of the BF implementation, their findings are similar to those of my research in 2010 in PIR and PNIR municipalities. Despite gains obtained from the IGD, these federal transfers were not

[97] The BF social council (*Instâncias de Controle Social*) is a body that oversees the BF implementation, which includes ensuring that the BF reaches the poor. ICS is comprised of an equal representation of civil society and government. ICS is also responsible for monitoring the supply and the quality of education and health services. (*Decreto 5209, 17/09/2004* art. 31).

enough to significantly reduce the implementation gap between poor rural municipalities and the research findings above-mentioned.

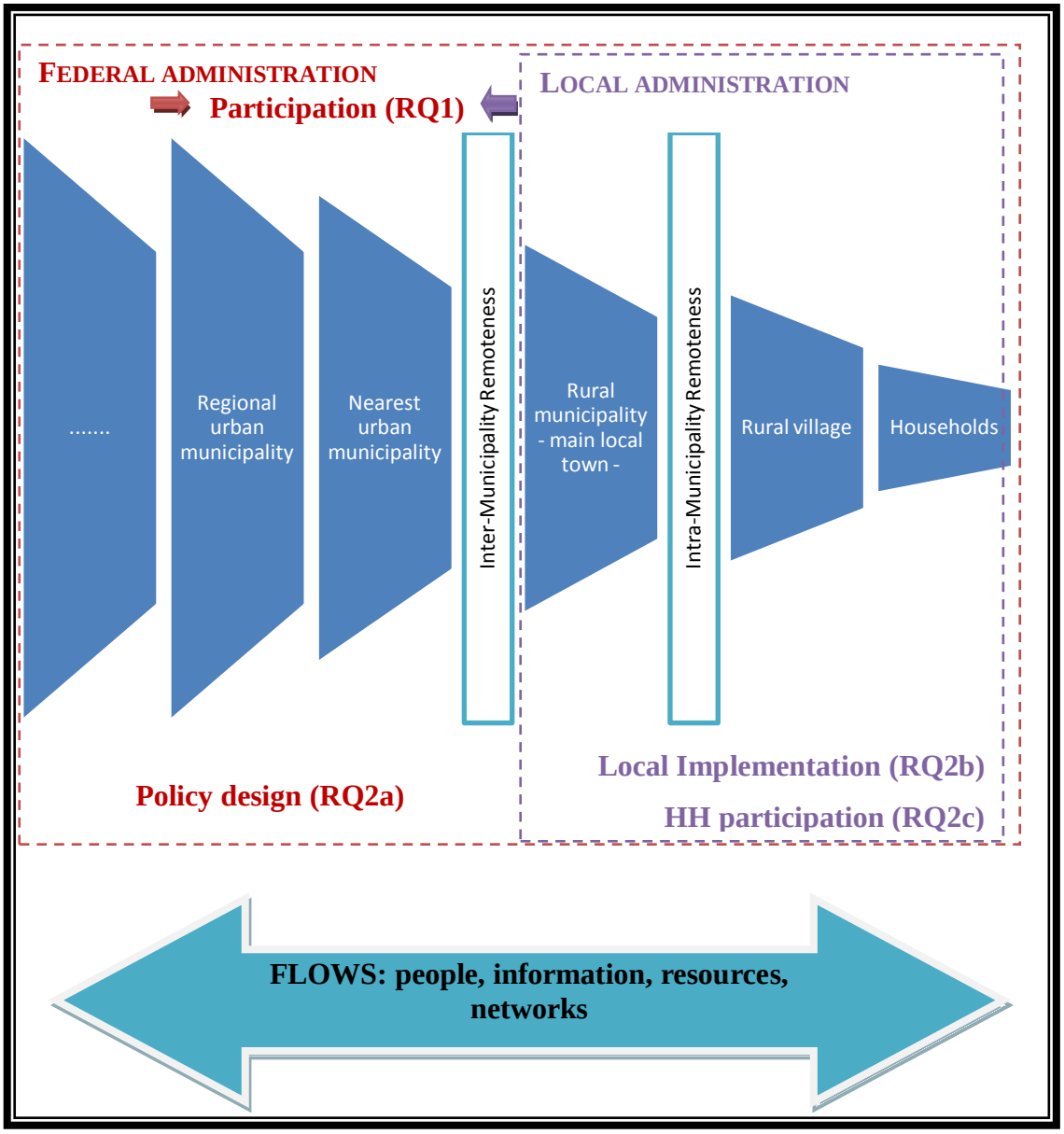
Studies conducted in low and lower-middle-income countries may shed light on the effects of remoteness on poor rural municipalities in Brazil. In Zambia and Malawi, Schubert and Slater (2006) found that limited administrative skills, and lack of guidance and supervision from federal ministries, made it difficult to implement conditional means-tested benefits. Given these local constraints, the authors said that the administration of social cash transfers should be "as simple and as undemanding as possible" (p.575). In Guatemala, Honduras and Nicaragua, Cecchini *et al.* (2009) highlighted the importance of an updated single registration to reduce clientelism and to improve targeting.

This chapter is based on a thematic analysis of 14 interviews with 19 interviewees, and on protocol observations and service profiling, as described in Chapter 3. The chapter is structured as follows. Section 6.2 recaps the analytical framework presented in Chapter 3 and introduces the coding themes used to carry out the qualitative analysis. Section 6.3 details the analysis of how remoteness influences local infrastructure. Section 6.4 explores how rural village location affects local implementation. Section 6.5 concludes this chapter.

6.2 Analytical framework and coding themes

I re-introduce the framework below for easy reference. The sub-division of remoteness into intra-municipality and inter-municipality forms, as well as the understanding that across the geographical space there are flows of information, people, resources and networks, all of these are important elements explored in the qualitative analysis of this chapter and the chapters that follow.

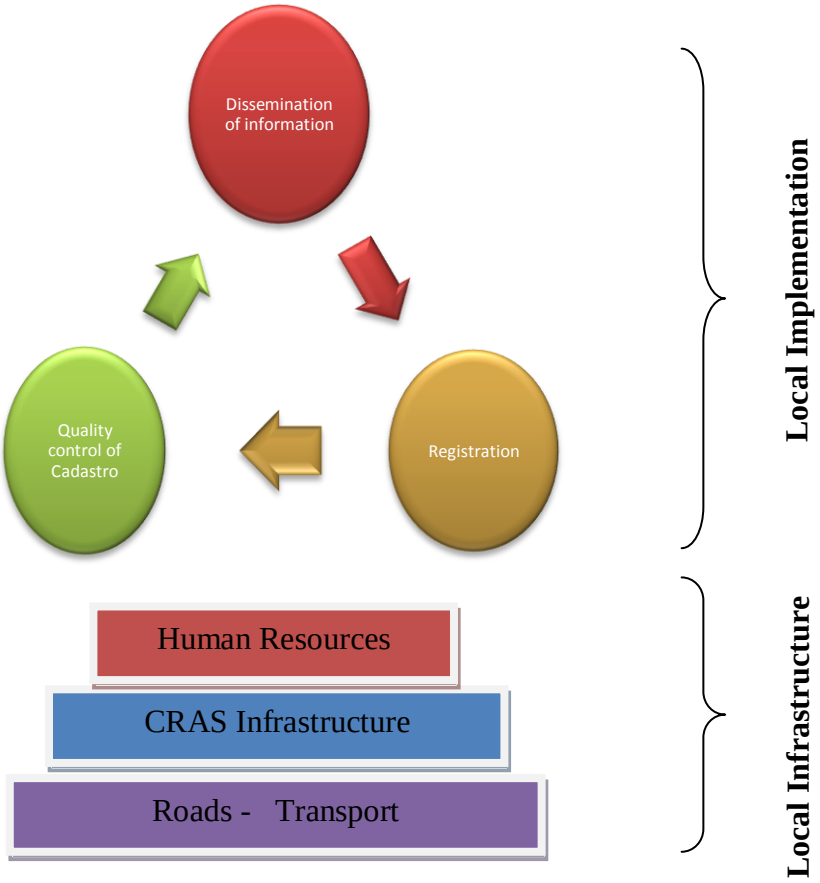
Analytical framework:



Source: author

The thematic analysis was conducted according to the codes illustrated in Figure 32. The local infrastructure represents the stepping stones for the local implementation. It cannot be assumed that some of the most basic local infrastructure like energy, computers and the availability of transportation are available in poor rural municipalities. In the case of PIR municipalities, then additional strains are put upon the local infrastructure due to remoteness. Although there are many themes related to BF implementation, I focus only on registration practices, *Cadastro* quality and information dissemination.

Figure 32: Diagram of coding themes



Source: author.

6.3 Local infrastructure: CRAS, human resources, roads and transportation

There are three main themes under local infrastructure that I would like to address: CRAS infrastructure, human resources, and roads and transportation

6.3.1 CRAS Infrastructure

Physical Infrastructure

Interviews and protocol observations suggested that the need to create and institutionalise CRAS quickly, in order to attend to the growing demand of the BF expansion, resulted in establishing services in inadequate spaces. For example, there are CRAS buildings without proper facilities (e.g. private interview rooms, waiting rooms) and others in inadequate locations (e.g. close to the mayor's office, in relatively well-off suburbs).

Only PNIR case studies reported their physical infrastructure to be "reasonably" adequate, with CRAS building in suburbs with high levels of deprivation, and even with the specialised social assistance service called CREAS[98]. PIR case studies, on the other hand, reported problems even with basic physical infrastructure such as energy and water, and this impeded the functioning of the facility. The lack of CREAS in PIR municipalities raises serious concerns about how to help households whose members have had their rights violated.

Service provision and opening hours

All local administrators talked about how intra-municipality remoteness affected local implementation by reporting difficulties in physically reaching rural villages, mainly the isolated ones. They also reported how households from isolated rural villages had problems in reaching CRAS. The latter information is supported by the reports from households, analysed in Chapter 8.

To make matters even more complicated, CRAS opening hours in some municipalities were limited, and this made it even harder for beneficiaries to attend

[98] CREAS – *Centro de Referência Especializado em Assistência Social* – offers services to families whose rights have been violated or who are under imminent threat.

the Centre. Limiting working hours is against the rules of the BF, which states that "municipalities and the Federal District must keep fixed registration points in constant operation to register families or to update their registration" (*Portaria No. 177, 16/06/2011,* art.5o).

Reducing the working hours of CRAS has the potential to exclude the persistently poor living in rural remote villages, as it reduces their possibility of registering and updating their registration. In addition, households living in remote rural villages have fewer transportation opportunities to get from their villages to the city. They would incur higher costs to register, not only because of their location, but also because of the possibility of having to undertake the trip more than once.

Availability of CRAS vehicles

Several interviewees emphasised the need for cars to reduce intra-municipality remoteness. Without cars, it is difficult to reach the isolated rural poor, or even to conduct an "active search" in order to give priority to the persistently poor. There were no cars available in PIR municipalities, and in PNIR municipalities there was a shortage of cars.

PIR local staff used several coping strategies, such as requesting the mayor's office for transportation during the registration periods, and visiting households using their own vehicles. The lack of vehicles reinforces staff perceptions that social assistance is not given priority in local administration.

> The mayor's office has one vehicle but it is often used by the Health Secretariat. Between Health and Social Assistance, the vehicle goes to Health to assist a person [in critical need] (002ii - PIR).

> you would [try to] request a vehicle to visit a family, to organise a meeting, to take the service to a remote community, a community that did not even know about social assistance because we couldn't go there. We would only go whenever a car was made available; even so it was a headache to find one because no one saw it as important. 'What are you going to do there?' they would ask … we faced so much difficulty then I thought 'we ought to have a car' (011 nn - PNIR, *reflecting on the situation prior to the car acquisition*).

Equipment

Although both categories of municipality showed the need for additional equipment (computers, internet and office supplies), there was a difference in their requests. PIR municipalities requested new equipment, whereas PNIR municipalities requested additional equipment. Isolated municipalities are forced to work in worse conditions than those that are not isolated, as reported below:

> The internet is not good, we keep losing the internet connection, there are days when it doesn't work at all, we stayed up to 11 days without internet because there is no option. The municipality has one provider for the whole municipality, for the mayor's office, for us, for everything. Even in municipality "X" (nearest urban municipality), you don't get internet – it is horrible. There are municipalities that there is not even a LAN house because there is no internet there yet (012 i - PIR).

The lack of internet or its poor quality represent a serious problem for the BF, because several operational procedures, including the registration of beneficiaries, access to benefit information and training, are conducted online. PIR municipalities fare worse than PNIR.

The new version of the *Cadastro*, which was implemented after my fieldwork, relies substantially on the internet. Interviewees whose municipality was not ready to transition to the new system reported their concern with this issue. At present, MDS offers two versions of the *Cadastro* system, because not all municipalities have transitioned to the full online version.

There are links between problems with the internet and the poor energy infrastructure. Power outages interfere with filling out, updating or transmitting registration forms. This substantially affects the local capacity to implement the programme

6.3.2 Human resources

Human resources influence the local implementation capacity and the quality of service provision, and this has an impact on participation rates. Training, staff turnover and types of contracts affect the implementation of daily activities, such as following registration procedures or solving technical issues. An investigation of the human resources of PIR and PNIR revealed very crucial differences and trends described below.

Training

There was a general complaint about training or capacity-building in both PIR and PNIR municipalities. Staff were either not officially trained at all, or had only recently been trained, despite having spent years in their job.

Another complaint concerned the content of the training. Interviewees reported that there was a need to have training related to problem-solving, especially *Cadastro* problems. This scarce information flow through training impinged on the capacity of the local administration to reproduce BF knowledge and to attend the variety of household demands. This, in turn, had an impact on participation rates.

> So, sometimes, we made a mistake not because we erred, do you understand? It is because we don't know, since we have never had a formal training and what we read is what is available and not everything is made available online (012i - PIR).

Staff cope with the lack of or limited training opportunities by arranging informal training with CRAS/BF staff in other municipalities. Inter-municipality remoteness plays an important part in this coping strategy. PIR municipalities resort to nearby local municipalities, whereas PNIR municipalities tend to have training in larger urban municipalities or even in the state capital. The location of the informal training also has an impact on the quality of the information passed on. State capitals or large urban municipalities, unlike small rural municipalities, have access to more up-to-date information; they also have more exposure to everyday problems, and this helps with the development of various on-the-job skills.

MDS has tried to address this issue by using distance education. This strategy was implemented in 2007 and 2008 (TCU 2009b). During this period there were four courses, attended by 9,550 local administration staff and in 1,648 municipalities. In addition, there are videos and reading materials available online. However, none of the municipalities I visited had taken part in distance-education courses promoted by the MDS. However meritorious the MDS effort in promoting capacity building, structural problems with transportation and internet access persist, predominantly in PIR municipalities.

Staffing and turnover

My research uncovered general complaints about staff overload. Staff can hold several positions at once, and this has an impact on the quality of their work. This situation is compounded by irregularities in staffing. Examples include one professional working for two different secretariats, another working for two municipalities, the "borrowing" of professionals from other secretariats to help during specific registration periods, and reduced opening hours of CRAS. The problem is made worse in PIRs because there are fewer staff, resulting in fewer services provided by CRAS. These findings raise questions about the costs of distributing national policy to local municipalities, and about the idea of using the BF as a platform for social and labour inclusion ("graduation agenda").

Another problem in these municipalities is high staff turnover, partly associated with the type of contracting practices, analysed below. The data show that inter-municipality remoteness influences the hiring process. PNIR municipalities can hire professionals from nearby urban municipalities. I interviewed several staff who lived in a poor rural municipality during the week and returned to their homes in an urban municipality on the weekends. PIR municipalities are less attractive to staff due to reduced leisure facilities and fewer opportunities for professional educational advancement. They attract fewer staff and have more difficulty in retaining them.

Inter-municipality remoteness influences the flows of people in terms of hiring opportunities. Proximity to the nearest urban municipality makes PNIR municipalities more attractive to qualified staff, who can work in the PNIR municipality during the week and return to the urban municipality during the weekend. This means there is a constant and pendular flow (to-and-fro movement) of people over the geographical space. PIR municipalities, as stated previously, are less attractive for professionals. So those who work in these areas tend to leave the municipality only at certain times (extended holidays and vacations), making the flows in and out of a PIR municipality inconstant. These flows seem like they were stationary, because people either stay within the municipality for long periods of time, or they stay away for long periods of time.

Types of contracting

Interviewees identified two types of contract in both PIR and PNIR municipalities: annual contracts and short-term contracts (there are also public servants, who are permanent employees). Annual contracts are generally issued to those with professional positions at CRAS, such as psychologists, social workers, and teachers; whereas short-term contracts are generally given to those with short-term, specific tasks such as those required during registration periods.

Although interviews with federal staff in Chapter 5 revealed attempts to de-politicise the BF programme by selecting beneficiaries at the national level, the influence of local politics still exists. Public servants are transferred from secretariats when a new administration takes over; annual contracts are renewed according to political agreement; and flows of informal networks and political preferences subtly underline the BF implementation, given the uncertainty of contracting and the lack of policy continuation. As one interviewee said:

> She [social worker] was working for the Social Assistance Secretariat but she was transferred to Health. And she was the CRAS coordinator at the past administration but because of politics, you know how it is, she was transferred … they put me here [at CRAS] recently … I was at the Finance Secretariat in the past administration (013i - PIR).

> Another thing, we depend on [local] politics and contracts are given to people who are not [public servants] … I am a public servant as I undertook the public test for administration not for social assistance though but I am placed here … There are another two public servants who are allotted here, the remaining staff are contractors. These contracts are annual. So, what happens, a contract like that already contributes for a job not well done, do you understand? We train one person, s/he gets it and when next year comes … the mayor can't hire any more or something else, then another person is hired, it gets very tiresome … I am trying to teach one person to do a job then tomorrow it changes, there comes another person, this is very tiresome (006n - PNIR).

6.3.3 Roads and transportation: inter- and intra-municipality remoteness

Condition and length of roads

The impact on participation rates of the condition and the length of roads is twofold. First, it has an impact on the municipality in its relation to the nearby urban

municipality (inter-municipality remoteness). Second, it has an impact on the relationship between households and local administration staff (intra-municipality remoteness).

As previously analysed, inter-municipality remoteness can influence municipality participation rates in terms of infrastructure (electricity and internet) and in terms of staff availability and training. The fieldwork showed that all of these issues are worse in PIR municipalities.

For example, one interviewee reported that, when a group of BF state administrators were training local administrators, they travelled as far as a nearby rural municipality but stopped short of visiting her municipality. She said that later in a meeting she raised her hand and objected to this practice:

> those living in my municipality they are people, they vote, they have rights, they are citizens. You knew that this municipality has no asphalt when you left the capital (002ii - PIR).

Inter-municipality remoteness can influence the availability of the service provision necessary for the BF implementation. Beneficiaries need to get their documentation at the CAIXA, a post office or a registry office (*cartórios*) in order to enrol in the programme, and these are services that tend to exist only in the nearest urban municipality. Then, when they receive their cards, they need to register their password at the CAIXA. Although the local administration sometimes sets up an arrangement with the CAIXA to come to the municipality, this is very much up to the local administration. The more isolated the municipality, the more costly it is for beneficiaries to access CAIXA or any of the other necessary services.

Intra-municipality remoteness also affects the implementation of the programme. Local staff in PIR municipalities reported difficulty in accessing isolated rural villages, whereas there was a systematic presence of CRAS in non-isolated rural villages. Isolated rural villages were mostly connected via dirt roads in precarious conditions. Interviewees reported that during the rainy season these rural villages could be cut off. Non-isolated rural villages were easily connected to the local town by tarmac roads, generally alongside the state highway. These two types of rural

villages require different implementation strategies on the part of the local administration.

> There is only one registration point at the rural village of xxx (non-isolated rural village). The social workers go there on Tuesdays and they meet the demands of that rural community. The demands of that village are met there (009nn - PNIR).
>
> Well, the biggest difficulty we have here is at xxxx (isolated rural village), right? There are places with very difficult access there. What do we do? What can we do to work with that community? We will put together a group, a team. We will stay at least two months in that village with this team, right? And there we will provide motorbikes as it is easier for the team to visit each house, because we can't leave one house without registration … We will register everyone, but we need to go to each house (014i – PIR).[99]

The above quote shows that, although local staff in PIR municipalities may have fewer opportunities to visit isolated rural villages, it does not necessarily follow that staff visit fewer houses in the villages. Considering that some rural villages can be spread out over different farms, staff may have to visit all houses in a low-density population area. Reaching out to this population is highly costly for local administrations.

Transportation and transaction costs

Although CRAS may find strategies for approaching rural communities, there are transportation costs borne by beneficiaries, and this is recognised by local staff. These are the costs people incur in going from their rural villages to the local town, CRAS, schools, health clinics and banking correspondents.

There are also transaction costs associated with information-seeking and benefit payments that could be related to either intra- or inter-municipality remoteness. Beneficiaries need to go to CRAS[100] to register and to obtain all sorts of information, i.e. whether their benefit has been awarded, why it was cancelled, why it was reduced, *etc*. Sometimes, they need to go to schools and health clinics to find out what the situation of their children is and to regularise their compliance with

[99] Motorbikes are used because there are places that cars do not have access to.
[100] Some CRAS have a separate building specifically for *Cadastro*.

conditionalities. They also need to go to banking correspondents to withdraw benefits, or to CAIXA to register their passwords.

There are interesting coping strategies to reduce these costs. Beneficiaries tend to go to CRAS on the same day as the municipal market. They get someone else to inquire about the arrival of their benefit card. Evidence from the interviews shows that beneficiaries sometimes give their benefit cards to other beneficiaries to withdraw benefits on their behalf, even though this practice is illegal without a power of attorney[101]. This was confirmed by interviews with banking correspondents.

Intra- and inter-municipality remoteness affects the cost of beneficiary transportation, with implications for participation rates. Households living in isolated rural villages have to allow more time for transport (which is often infrequent due to the remote location) to reach CRAS or CAIXA during their opening hours to deal with their benefit issues. Assuming the average benefit value in 2009 - calculated as R$95.00 or US$41.00 (Soares *et al.* 2010a p.305) - and applying it to information in the qualitative dataset, estimated costs incurred solely on transportation varied from 7% to 59% of the benefit value in PIR municipalities, and from 3% to 21% of the benefit value in PNIR municipalities. Due to remoteness, some beneficiaries may need to add lodging costs. The isolated rural villages in which I carried out interviews had private transport up to three times a week to the municipal town hall. But even on the days when there was transport, the transportation pick-up and drop-off can impose high opportunity costs. Sometimes, a whole day is lost visiting these institutions.

In sum:

(i) How does remoteness influence the local administration infrastructure, which, in turn, may have an impact on the BF participation rates?

Although there were common problems faced by PIR and PNIR municipalities, such as staff overload, high turnover, insecure contracts and lack of training, PIR municipalities are comparatively worse off.

In terms of inter-municipality remoteness:

[101] Art. 23 §2 *Decreto No. 5209, 19/07/2004* states that CAIXA allows beneficiaries to give power of attorney to another person, as long as it is issued by the local municipality.

- PIR municipalities experience relatively worse physical infrastructure, and problems with internet provision, which is important for beneficiary registration.
- PIR municipalities have difficulty in attracting and retaining qualified staff, resulting in higher turnover.
- Training for PIR staff is not readily available. They need to go to the nearby urban municipality or to the state capital, and this requires money and time. On-line training provided by MDS is difficult to get access to due to shortages of computers and unreliable internet provision.
- Distance, infrequency of transport and bad road conditions to the nearest urban municipalities influence people's access to the complementary institutions that are required for the implementation of the programme, such as CAIXA. These institutions are generally not present in PIR municipalities.
- Remoteness influences the flows of qualified staff, training, information-sharing and institutional exchanges. These flows tend to be inconstant and stationary.

In terms of intra-municipality remoteness:

- The lack of cars in PIR municipalities makes it difficult to cover all the rural villages within a municipality and to "actively search" for the persistently poor in remote rural villages.
- Distance, frequency of transport and road conditions play a crucial role in increasing the communication between CRAS and households.

Given the PIR local infrastructure detailed above, the onus seems to be on the persistently poor themselves to reach out to CRAS, and incur the costs necessary to overcome the intra- and inter-municipality remoteness. It might be suggested that the incentive to enrol in the programme lies with the potential beneficiary; the poorer the potential beneficiary is the stronger the incentive to enrol. However, this claim does not take into consideration that the persistently poor would also have to cope with various layers of transaction costs before any benefit is received, costs related to documentation, information-seeking, transportation, food and possibly even lodging.

The analysis, therefore, suggests that the local infrastructure under which PIR municipalities operate have the potential to result in lower participation rates and registration of the persistently poor.

6.4 Local implementation: dissemination of information, registration and *Cadastro* quality control

Building on the findings from the previous section, I look at the complex interaction between the remoteness of the rural village, i.e. intra-municipality remoteness, and local implementation. I specifically analyse the dissemination of information, registration and quality control.

6.4.1 Dissemination of information

Strategies

CRAS uses television, radio, a car adapted with a loudspeaker, pamphlets, workshops and posters at the mayor's offices to disseminate the BF information. There is also an enormous amount of information given face-to-face, either when beneficiaries go to CRAS or when CRAS visits the rural villages. In addition, school teachers and health workers are also BF-information disseminators. And finally, there is the informal "word of mouth" when beneficiaries inform each other about registration, updating of the *Cadastro*, arrival of benefits, or reasons for cancellation.

The data showed that isolation plays an important role in the type of strategy chosen. Isolated rural villages tend to be more associated with *in loco* strategies – e.g. the hire of a car with a loudspeaker or a visit of CRAS staff to that location.

The politics of informing the targeted population

Often it is the local authorities who inform potential beneficiaries about details of the programme, and this can cause problems for BF staff when they have to correct this information. As one local BF administrator said:

> There are people that don't know the programme and inform beneficiaries … and when they [the beneficiaries] arrive here [at CRAS], they tell me 'but so-and-so told me that it is like that'. Until you deconstruct this information, say that that information is wrong, or it is not completely right, it takes a lot of time. We face this difficulty (012i – PIR).

In addition, local BF administrations report that information from the federal government puts an additional strain on the relationship with potential beneficiaries:

> we always blame the press … it is Lula, Lula and his staff, the president, the staff, when they send out a press notice, they don't give any clarification about the rules, the criteria, the things, they only tell you that everything is good, you have a right to the benefit – there was even an ad that said 'everyone has the right to the BF' … so when a woman hears that 'everyone has the right' she has a certain reaction (011nn – PNIR).

> And there is a constant request, all the time there are families asking us … 'I saw at the television that the number of benefit increased' … who has my benefit? … it must be that psychologist there …. (laughs) … so they come with this perspective, 'hey, the television informed that the number of benefits increased, if they have, why haven't I received mine?' And 'why only this?' meaning the perspective of having more, of gaining more … and there are others who want to receive a benefit that they are not entitled to… it is very difficult, very difficult indeed (011nn - PNIR).

Whether the dissemination of incorrect information is a conscious political tool, or simply an error, is difficult to say. In any case, most of the targeted population in PIR and PNIR municipalities are functionally illiterate, and they may take the information given to them by the authorities at face value without conducting further checks.

The TCU audits (2006) have highlighted the issue of the generality and imprecision of national political advertisements. MDS has put a considerable amount of effort into responding with various information tools directed both to the local administration and to beneficiaries. Among these tools are TV commercials, jingles, pamphlets, manuals, emails, weekly bulletins to targeted audiences (BF managers, social councils), and even radio soap-operas. Although these practices have been going since July 2005, their use by local administrations is still restricted, and I did not see any in the poor rural municipalities I visited.

Lack of knowledge of the selection process – mistrust of beneficiaries

Local administrations not only lack knowledge of the selection process, as reported in Chapter 5, but also of the timeframe for inclusion of beneficiaries. This practice is costly for the persistently poor living in remote rural villages. Since they have no indication of how long they should wait until a benefit is made available to them, potential beneficiaries have to keep going to the local CRAS. They could phone MDS to inquire about their benefit, but this is difficult for them due to patchy mobile

coverage and limited landlines in isolated villages. The rural poor in isolated communities face more costly consequences than those in less isolated circumstances, as they have higher costs of transportation, which also takes more time.

Lack of knowledge about the selection process, plus the dissemination of incorrect information, are harmful for the relationship between the local staff and families. If the local administration does not understand the "black-box" that is the selection process, neither do the potential beneficiaries. The relationship is permeated by abuses and threats – a problem also raised by a TCU audit (2009b p.122).

> Yes, we have received threats … Once there were citizens with sticks to break all the computers and the girls embrace the computers (laughs) … They call us names, if we arrive with different clothing it is because we are stealing from the BF … because the mayor is the CRAS coordinator who is stealing their money – this is how they see us (008nn - PNIR).
> Me: Did you experience verbal aggression?
> Several times (013 I - PIR).

> So that you have an idea what it is to work with the BF. We even have been threatened here.
> Me: Death threats?
> Like that. Uh-hum. If you don't want it … somebody could come and shoot you if you don't work correctly, do you understand? So, I have been on the radio to clarify who is eligible for the BF, at council meetings, conferences but these people when someone speaks of money they think like this 'I have the right, I want it, do you understand? By force' and several municipalities have various problems like this (014i - PIR).

6.4.2 Registration process and possible reasons for exclusion

By "registration" I mean three different administrative actions: the registration itself (*inclusão*), the update (*atualização*) and the recertification (*revalidação*) of the *Cadastro* (*Portaria* No. 177, 16/06/2011). Registration is the act of registering the household information at the *Cadastro*. Recertification and update are both checks of the *Cadastro* form conducted every two years, at least: the former is a confirmation that the existing information is unchanged; the latter is an updating of the form in the light of a modification of circumstances. In this sub-section I analyse factors mentioned by local staff that affect the registration process, and that could possibly result in exclusion of the poorest. These reasons are cross-checked with reports from households in Chapter 8.

Knowledge of the programme during registration

During the registration of a potential beneficiary, there are some practices that could affect the participation rate of a specific municipality. One of them concerns the information given to beneficiaries during their registration. If beneficiaries know about the eligibility criteria, they can understand whether or not their benefit has been incorrectly established. If they know about the conditionalities, they can ensure that these are met.

During my fieldwork, I observed that some health staff and CRAS managers did not know what the BF eligibility criteria were, and had little knowledge of the programme in general. This is particularly troublesome given that they work with the BF target population. BF staff reported that they did inform potential beneficiaries about education and health conditionalities during registration, but the more awareness local administration staff have of the BF programme details, the better informed potential beneficiaries will be. Health staff and CRAS managers who are ill-informed about BF criteria can fail to issue warnings against cancellation for non-compliance. It can also mean that eligible people miss out on opportunities for registration.

I also found evidence that the complexity of the programme affects the beneficiary's understanding of the programme implementation. This has several consequences, such as an increase in the transaction costs for beneficiaries who constantly have to go to CRAS to ask for information or to solve difficulties with eligibility and benefit payment.

Given the complexity of the BF, the limited training and the high staff turnover, it is no surprise that the data show evidence of the dissemination of incorrect information. Staff in PIR municipalities have more difficulty in accessing information. They have reduced exposure to training, to online materials and to the BF network of professionals. Thus, location influences how knowledge is produced and reproduced, impacting on the local understanding of programme implementation.

Lack of documentation

The main reason highlighted by local staff for the possible exclusion of eligible families from the BF *Cadastro* database is lack of official documentation. MDS has identified this problem and issued a note to all municipalities instructing them on how to proceed (MDS 2007a). MDS recommends that, when the people without documentation are identified, the municipality either provide them with transportation to the registry office (*cartórios*), or bring representatives of the relevant institutions to issue documents *in loco*.

Lack of documentation has an impact on participation rates because, without it, potentially eligible families are not even included in the *Cadastro* database in the first place. Several documents are needed for a household head to register her/his family at the *Cadastro*. The household head, generally the mother, must have her own birth certificate or identity card, as well as a tax file number (CPF[102]) or a national electorate card. Household members should also have documentation, such as birth certificates, to be included in the registration form.

The process of obtaining these documents is cumbersome. Birth certificates can be obtained from the registry office until the child is 12 years old, or through a judicial process after that age. This differs from countries where birth certificates can be issued by maternity wards. The estimated difference between the number of births registered in maternity wards, and those registered at the *cartórios*, is more than two million individuals, who are invisible to the public policies (MDS 2007a). Although there is no cost to obtain birth certificates from *cartórios*, some municipalities have no *cartório*. This was the case in all of my case studies.

As already mentioned, the household head needs to obtain either a CPF or a national electorate card. The CPF is obtained either at a post office or at the CAIXA. It costs R$5.70[103]. If the mother is between 18 and 69 years old, she has to show her national electorate card in addition to her birth certificate in order to get the CPF. Not every

[102] *Cadastro de Pessoa Física*
[103] R$5.70 (US$3.27 as of January 2010). From 2012 onwards, the CPF has been free of charge if requested online. However, PIR municipalities have problems with internet provision.

municipality in Brazil has a CAIXA, although post offices are better distributed throughout the country.

Some mothers may prefer to get the national electorate card instead of a CPF, since it is free of charge and it is a prerequisite for the CPF. She has to go to an electoral registry office (*cartório eleitoral*) and present her birth certificate and some proof of address. Valid proofs of address are telephone bills, water or electricity bills, and bank account statements. This proof-of-address requirement can be challenging for the poor, especially in areas where housing arrangements are sometimes not formal, not to mention the difficulty in visiting an electoral registry office in another municipality.

Local administrations do attempt to facilitate the documentation process. They may arrange transportation to the nearby urban municipality, which has a CAIXA, a *cartório*, and/or an electoral registry office. Other municipal administrations take one-stop stalls with them when they visit remote areas, where individuals can get all the documentation they need at once.

Therefore, difficulties on the government side relate to the scattered dispersion of the services beneficiaries need to obtain their documentation. On the beneficiary side, there may be a lack of valid proof of address, or a lack of money to cover the costs of documentation and transportation. Thus, it is challenging for the rural poor to obtain all the documentation needed for registration at the *Cadastro*. The challenge is even greater for those living in isolated rural villages.

The administrators I interviewed also mentioned families who had lost their documentation. In this case, reissuing their documentation, such as birth certificates or national identity cards, must be paid for and must be done at the original place where the birth was registered. These two conditions are far from easy for the rural poor. For a population that constantly migrates, as explained below, getting replacements for lost documentation may represent an enormous task.

Migration

Interviewees mentioned migration as another reason for exclusion from the BF. Local administrative staff said that they believed that the migration pattern of the

rural poor had two consequences: (i) they cannot be located; and (ii) new migrating families do not immediately register in the areas they have moved to. When families cannot be located, there is a strange result: CRAS has unclaimed benefit cards. The evidence points towards migration rather than an increase in family income, as these families cannot be located in the municipality they originally registered in. In Chapter 8, I will analyse households' life accounts of migration.

Limited quota

Some of the local administrators also pointed to the fact that there is a number of "eligible but not beneficiaries" registered at the *Cadastro*. Some of them had requested additional benefit allocation. They reported being "embarrassed" by the eligible but not-beneficiary families who constantly seek information about the approval of their benefit claim (014i PIR). As mentioned previously, there is already an element of mistrust in the relationship between local staff and households. The fact that eligible households are not receiving their benefit increases the tension. This finding supports the findings from Chapter 5 on how the local quotas are established and allocated between municipalities, and the consequent possibility that the local quota might not reflect the actual number of poor households.

Cadastro errors while registering

In the case studies, there are reports of *Cadastro* software problems faced by the local administration while registering. This has an impact on participation rates since potentially eligible households end up not being included in the national database, and not taking part in the benefit allocation.

Problems pointed out by *Cadastro* technicians were related to processing problems, particularly the divergence between the local and the national databases. Interviewees reported that, sometimes when they updated forms locally, this was not reflected at the national level. They reported several updates that had been lost, and said there was a recurrent need to check the update of registries.

One interviewee reported a recurrent processing problem with an "invalid return file". This involves a household registration form being put on hold due to system problems: the local administration sends the file to CAIXA but CAIXA is not able to

read it. The problem is not only that CAIXA cannot read the file, but also that the local administration cannot make changes to it. The household, meanwhile, has to wait until CAIXA can solve the problem. This is worrisome, as potential eligible beneficiaries are completely out of the system without any social assistance support. The quote below shows that there are cases of potential beneficiaries waiting for more than a year for their situation to be solved.

> Since May 2009 we have had problems with the "return file", meaning, we send the files but we can't receive them back. There was an error message saying 'this document is not a valid return file' ... but we still have forms of families that were updated last year and they are still there and we cannot make any changes … We spoke with CAIXA and they sent us their technical support … but according to them … this will only be normalised with the new system (006n – PNIR).

Local adaptation to registration practices

Local variations in registration practices also have an impact on the priority given to the poorest and on participation rates. Four are worth mentioning: (i) inconsistency in assessing the income of rural workers; (ii) the use of the BF social council as an approval body; (iii) the exclusion of family members when updating the *Cadastro*; and (iv) the influence of local politics in the registration process.

The income of rural workers is by its very nature difficult to assess, and yet it is the basis of the means tests used to assess eligibility. The rural poor generally do not enjoy the benefits of formal employment; they may grow their own subsistence food; and any formal income is seasonal. All of this requires different procedures when assessing the monthly income of the rural poor. Some local public servants write whatever value the mother states; others ask the mother to calculate an average of income per month; others tell the mother to inform them of the lowest income estimate per month.

Inaccuracy is reflected not only by different collection procedures from different municipalities, but also by requesting that the poor estimate their own income – a highly volatile income in the case of the rural poor – which is then subjected to means test.

The case for moving beyond income indicators to assess poverty is strengthened when we consider how remoteness and geographical variables influence the possibilities of livelihood diversification for the persistently poor, as noted by these two very different statements:

> Generally, what do we do? This is very complex, really … the farms here are very small. Here there is a period of drought, nothing that they plant grows. So, those that are poorest they are in farms that are really … [although] this is a self-declaration [of income], you see that under no condition they are lying, you know? Whatever they earn there, they can barely eat with it … if you need this [fruits, vegetables] in one of these farms, the majority of them, 99.9% you will die, without counting the diseases. Because you have no water, lots of them have no water, the water here is brackish, and it tastes bad because it is really salty. So, they don't have anything – it is really their manioc, the corn, which lots of times he loses his harvest. Like this year, lots lost their corn and manioc harvests, only subsistence really, there is nothing they can use to earn money, there isn't (012i – PIR).

> The people that are waiting for a place (at the BF), we put them in CRAS projects, but I will be very sincere with you, the majority of the population of this municipality is not the poorest of the poor, they are not starving. Obviously there are some, I am not going to say that there aren't any, but it is very hard. Because our municipality has various benefits … If you go to a farm, you will see the abundance of fruits, you won't starve, you get a fruit and you will sell it at the market downtown, and you will succeed, you will earn your money. It is not a city in which you can't survive. They plant a bean sprout and they harvest it … sell it and eat it, right? (007n - PNIR).

Another local variation of the registration practice that stood out from the dataset is the use of the social council (ICS) as an approval body. ICS has an important role in quality oversight of the programme. Springing from the 1988 Constitution, which institutionalised the national councils, the BF social council follows the same tradition of democratic participation in elaborating, managing and overseeing the BF programme. The social council at a municipal level represents an important achievement of modern Brazilian democracy.

In this local practice, the council "approves" the insertion of the information of a particular family in the *Cadastro*, and if the council does not approve of it, the family is not registered. This may be a mechanism for giving priority to the persistently poor and ensuring the quality of the information entered. However, it is not legal – the eligibility threshold is not approval by the ICS, but rather the income cut-off. Interviewees reported that, in practice, the council gathered to "rubber stamp" the

Cadastro forms, rather than deciding whether to reject them or to give them priority. But whatever the reason, this local practice would result in longer waiting periods for the registration forms to be inserted into the local *Cadastro*.

In relation to excluding family members from the system, one municipality reported a novel way of dealing with conditionality breaches. Instead of allowing the family's benefit to be suspended through the non-compliance with school conditionalities of one of its members, the local administration excluded this family member from the *Cadastro*. This would make sense if this family member were living in another municipality and no longer linked to the household. Even so, the family member is most likely a young adult still of school age who should, according to the programme, still be studying.

However, instead of enforcing conditionality compliance and pushing this family into further destitution, the local administration staff flexibly adjust the programme, thus demonstrating an understanding of the family situation. Enforcing compliance may not address the reasons why this young adult is not attending school. This example uncovers several facets of household needs, further explored in Chapter 8, such as: the need for additional income; migration as an alternative livelihood strategy to diversify income; possible lack of interest in the educational system, *etc*.

Some of the local staff I interviewed reported that they faced political pressure while updating their *Cadastro* database. Although the BF mechanism was considered to be "politics-proof", as reported in Chapter 5, the case studies shed light on the influence of local politics in the processing of updates.

> They [local authorities] even say 'this [the BF] is from the government … what do you have to do with it? Why do you want to know about income?' that is to say 'let this supporter continue receiving the programme otherwise there will be problems' and this is a problem, as I used to say, a problem not only with the opposition but also with those in government because there is a very strong political culture here, right? There is a partisan question … sometimes a beneficiary gets a job and we block the benefit, then s/he comes to us aggressively, he goes to the mayor's office complaining … There are people still with this mind-set, and we have suffered a lot with this (011nn - PNIR).

One of the strategies for *Cadastro* updates is to wait until the next political election takes place, so that beneficiaries and potential beneficiaries may have some sort of contracting with the local town hall or the mayor's office.

Lack of prioritisation of the persistently poor living in remote rural villages

This chapter reinforces the findings from the previous chapter on the lack of priority given to the persistently poor living in remote rural villages. Interviewees said that the ICS was not involved in closely monitoring the registration process. I did not see any evidence of local administrations conducting active searches to register the persistently poor.

Furthermore, interviewees said that the expansion of the BF during the first years of implementation was directed towards the urban areas of rural municipalities. The acquisition of means of transportation for registration *in loco* was possible only after years of programme implementation. The persistently poor living in isolated rural villages were expected to get themselves to the local town to register. Given all the difficulties in infrastructure, income, human resources and documentation listed above, the registration of the poorest in isolated rural communities was at best limited.

Also, as documented in Chapters 4 and 5, the expansion of the programme in the first years resulted in higher rates of inclusion than in subsequent years as the national cap was reached. Late registration of the persistently poor in remote rural villages in PIR municipalities could have resulted in reduced chances of benefit take-up.

6.4.3 Quality control of the Cadastro

Quality control - prioritisation of the poorest

As indicated by federal interviewees in Chapter 5, if the local administration has a good quality *Cadastro*, this can increase the chances of the persistently poor being registered and given priority when benefits are allocated. As already demonstrated, such priorities do not happen during the registration process. Other ways in which prioritisation can happen is through activities to control the quality of the local

Cadastro. This can be carried out through home visits and an active social council (ICS).

Home visits depend on staff and vehicle availability. The legislation supports the view that home visits are the most adequate method to register potential beneficiaries, as they ensure that the information collected will be of good quality. Home visits, nonetheless, are not carried out as often as required. PIR municipalities have few vehicles and have more difficulty than less isolated municipalities in reaching out to remote rural communities.

As well as using home visits to ensure that good quality information and the right priorities are entered into the *Cadastro*, other strategies used by local administrations are the use of health community workers during registration, and cooperation with the school council. Community health agents live in rural communities and they know the financial situation of each household. Some municipalities use their services during registration, and this may help to ensure higher quality recording of information on the *Cadastro* form. The school council also works together with the local CRAS and BF administrators. Whenever a pupil is absent from school, CRAS can immediately work with the social council, thus reducing the possibility of benefit cancellation.

However, evidence supporting the above strategies is mixed. Some BF local administrators actively engage with school councils, CRAS and the health agents, others don't. BF staff have pointed to the lack of information on the part of local health and education workers, as a factor making difficulties for social assistance when they need information about how to give priority to the persistently poor.

Ideally, ICS should play both an active role – inspecting the BF, including identification of the poorest families – and a reactive role, when it is called to act upon complaints (*Instrução Normativa No. 01, 20/05/*2005). However, I found that the ICS was performing both these roles with limited capacity, at best.

In the case of the limitations on their reactive role, both ICS and BF staff reported that they received few complaints. There is a possibility that complaints may be more difficult to lodge in remote rural villages with generally tight social cohesion and

intricate social relationships. Having a good relationship with their community may be perceived as a very valuable asset and filing a complaint could harm this relationship. This is further investigated in Chapter 8. Other research has found that the municipal absence of a "civic tradition of social [democratic] participation" results in lower ICS participation (Magalhães *et al.* 2007). The quotes below highlight local administration staff reporting that the population and ICS are afraid of retaliation by their peers and by local politicians:

> Everybody needs help, practically everyone here mainly from rural villages they need help, because this is a small municipality with difficult access to… so, it is difficult for people to file a complaint because everyone knows everyone… they come here and say 'I am not going to put a complaint against so-an-so because I don't want any trouble', it is like this (005ii - PIR).

> (…) it is funny, because they say 'oh… there are loads of people who receive [incorrectly] in my street'…. So I say 'you can give their names, the name of your street, that we will investigate, if she does not have the profile, her benefit will be cancelled', they say 'oh but I won't say it… I am not a snitch, I am not here to tell on people….' (…) (012i - PIR).

> Me: what are they afraid of?
> They are afraid of politics… because the complaints are anonymous, nobody will know about it, but people are afraid of others going there, asking around, of fights… They are afraid of … of [losing] their work sometimes, do you understand? Because you are not able to get another job, the source of employment here is the mayor's office, so, they are tied to it… thus, it is all of this (013i - PIR).

There are important themes in the quotations above. The idea that "everybody needs help" shows how the supposedly "residual" BF benefits are perceived by the BF local staff. "Help", as opposed to "right" to minimum income, is a transitory state of need and, possibly, has close links to "hand-out" or *assistencialismo*.

Another important consideration from the extract above is again the influence of politics. "They are afraid of politics … of [losing] their work" (013i - PIR). As I will argue in Chapter 7, living in a PIR municipality with reduced work opportunities, which are mostly based on political contracting, reduces any possibility of community participation. Households are at the mercy of the favours of the local mayor's office.

In the case of ICS' active role in implementing the programme, it appears that it is not being carried out. The fieldwork found that ICSs do not conduct active searches to

find out if the persistently poor are receiving the BF benefit, they do not inspect the BF receipts, and they do not act as external bodies monitoring the implementation of the BF programme.

In PIR and PNIR municipalities, where local politics plays an important role in the lives of its inhabitants, individuals are not able to exercise basic elements of their citizenship, their civil rights to start. Civil rights, one element of Marshall's concept of citizenship, entail freedom of speech and the right to justice (Marshall 1950). These elements are usually absent, as the quotes above show. Thus, the power to exercise political rights and citizenship, through ICS is very limited. Half the members of an ICS are from civil society, and half are from the local government. I believe that the mere presence of government representatives may reduce even further the possibility that investigation of BF implementation practices will be independent.

ICS participation in oversight of the BF is "minimal". Of course, there is a connection between this minimal participation in the BF oversight and the lack of understanding of their role because of the lack of training. The current situation is such that:

> The Council's participation here is minimal, it is very little, convenience, you know? It is like … they arrive, they need to approve this … so, the president speaks the most and says what needs to be done … so, the council is not very active, not indeed … It seems like they only have that mind-set of approving [what the president says needs to be done], not of inspecting (013i – PIR).

It is important to note that in one of the municipalities, council members voiced a fear of retaliation from other members. The current situation of benefit allocation is normally not questioned, but if it is, little changes, they say.

Unwitting cancellations

Sometimes benefits are unwittingly cancelled due to system errors. In these cases, expedient solutions are vital for ensuring the quality of the *Cadastro*. Furthermore, system errors that fall under the category of cancellation are a matter of concern given that benefit cancellation results in food insecurity, financial insecurity, stress and reduced assets.

MDS has developed tools for the local administration to correct system or information errors. Nonetheless, local administrations reported difficulties in dealing with the federal government. There were problems getting through the helpline, and a lack of response to emails or official correspondence. This results in long waits:

> The person comes here [to CRAS] asking how the request is and you … only ask her to wait, normally this is what we say, there is nothing else to say. You wait too. There are people waiting for a year… I cannot solve her case, I have already sent a formal letter to the federal government, I want to send another one, do you understand? I haven't received their response yet. So, this is what if I could improve upon I would. There are some cases that you cannot solve; you depend on the federal government (014i -PIR).

> Look, I have problems [contacting the federal government] … because the telephones at the MDS, I can't get through. Whenever it rings, no one answers or they are always busy … the day that someone picked up the line, a very ill-mannered person answered the phone … I was trying to call for days and the time that I finally got through she mistreated me! … so, [the relationship] with Brasília, we don't [have a good one] (012i - PIR).

Duplication of entries

Interviewees reported that duplication of forms was one of the causes of cancellation, although this happened mainly during the first stages of the programme. Duplications could be result from: (i) families enrolling in different municipalities; (ii) the same household member enrolling on more than one form; or (iii) the technician sending the form twice.

This theme is associated with migration. Families migrate to other municipalities and end up registering again. Members of a family migrate in search of better education or work opportunities and end up living with a relative (or a divorced parent). This relative ends up adding this member of family to their household.

> for example, she was living close to the municipality border. So, she goes to the nearby municipality and registers there. The benefits there are taking a long time to be granted, because there are people that only received now, after 5 years … So, what does she do? She comes here and registers again. Little does she know that the *Cadastro* is national, there is only one database … when she enrols there and here, there is duplication and then the benefit is released neither there nor here. Her situation becomes even worse (014i - PIR).

Thus, for families that are in persistent poverty or in desperate need of the benefit, the strategy to register in various places may result in blocking the household's registration altogether.

In sum:

(ii) How does the remoteness of the rural village influence local implementation, and what impact does that have on the BF participation rates? And does the local administration give priority to the poorest during the BF implementation?

Intra-municipality remoteness influences implementation practices at various levels:

- Remote rural villages receive fewer visits of CRAS staff. The persistently poor in remote rural villages have more difficulty in visiting CRAS at the local town. The interaction of these two factors is a vital element in the flow of information concerning registration, eligibility, conditionalities, selection, and so many other important aspects of implementation.
- It is very costly for CRAS to conduct frequent home visit in isolated rural villages in PIR municipalities. This may result in lower quality *Cadastro* registrations, difficulty in conducting active searches, and less priority given to the persistently poor.
- The persistently poor in remote rural villages of PIR municipalities would have more difficulty and higher costs to obtain the documentation required for registration.
- Local administrators suggest that households are hesitant to file complains of incorrect benefit allocation, as they are afraid of retaliation either from their community or from local politicians. One can speculate that the smaller the rural village is, the more hesitant households may be to be identified; and the more remote the rural village is, the more households depend on their neighbours for assistance. These connections will be further explored in Chapter 8.

The analysis indicates that the more remote the rural village is, the less likely that local administrators would keep an updated *Cadastro,* conduct local visits, and receive reports from incorrect benefit allocation. The persistently poor living in the

remote rural villages of PIR municipalities may have less contact with CRAS staff to learn about the programme, and may have higher costs to obtain documentation. Therefore, it is very unlikely that PIR municipalities are able to give priority in their local implementation to the persistently poor living in remote rural villages.

I also identified issues of concern in both PIR and PNIR municipalities:

- the complexity of the programme results in additional local practices, which may not lead to improvements in registration or in giving priority to the persistently poor.
- the influence of local politics can be seen in pressures for local staff not to update the *Cadastro*, and for households not to denounce non-eligible beneficiaries. The local population is at the mercy of the favours from politicians in relation to employment contracts, as the mayor's office is the main source of employment in both PIR and PNIR municipalities.
- the mistrust between households and local administrative staff sometimes results in staff being abused.
- the local administration has difficulty reaching the federal staff to solve *Cadastro* problems, and this results in longer waiting periods for potentially eligible households.

6.5 Conclusion

In this chapter, I used a comparative analysis to investigate RQ2b, how the local implementation of PIR municipalities differed from PNIR municipalities, using a set of 14 interviews, protocol observations and service profiling. This chapter builds on previous chapters that highlighted how important local implementation is to the understanding of the issues of participation rates and giving priority to the persistently poor.

The interviews with federal government staff reported in Chapter 5 showed that there were concerns at the national level about the possibility that the persistently poor were not being given priority in the BF programme. This chapter shows that the local administrations were having difficulty in implementing the BF programme in remote rural villages, mainly in PIR municipalities. This chapter strengthens the previous

analysis, as the local administration point of view supports the previous findings: there is the possibility that the lower participation rates in PIR municipalities are a consequence of more efficient municipalities taking up some of the local quota that should have gone to PIR municipalities. Thus, lower PIR participation rates do not necessarily mean that there are fewer poor households; nor does it mean that benefits are going primarily to the persistently poor.

The analysis concludes that the geographical location of the poor rural municipality (inter-municipality remoteness), and the location of the rural villages (intra-municipality remoteness), influence local infrastructure and local implementation. But, let me be clear, I am not saying that remoteness is the main factor driving lower participation rates. There are several factors uncovered by this chapter that are associated with these levels of rates, such as reduced infrastructure, less technical capacity to deal with *Cadastro* problems, difficulties in conducting registration at remote rural villages, migration, *etc*.

The analysis based on the framework of remoteness and flows paves the way for two types of policy recommendations. Inter-municipality remoteness shows structural bottlenecks linked to the geographical location of PIR and PNIR municipalities, and these require long-term policy recommendations. The local infrastructure limitations in terms of physical resources, human resources, linkages to urban areas and road quality are beyond the BF programme, however direct an impact they have on its implementation. Overall, there is a need to broaden the policy analysis to include regional development initiatives, and to rethink the implementation of this programme for the persistently poor in PIR municipalities.

Short-term recommendations address local BF implementation directly, and also intra-municipality remoteness constraints. The need to address transport issues is urgent, as infrastructure is necessary to conduct more frequent actions and information dissemination in remote rural villages. CRAS staff need to have a more visible presence in places where poverty is higher, such as in remote rural villages. Regular training and support of CRAS staff as well as ICS members would represent a significant asset for local implementation, in addition to increasing the feedback

between local, state and federal levels. A review of the local administration contracting practices in Brazil is highly recommended to reduce reshuffling of staff.

This chapter links with issues raised in Chapter 5, and provides a bridge to the discussion of the same issues on the household level in Chapters 7 and 8. First of all, Chapter 5 demonstrated that the severity of poverty was not considered in the state quota allocation to small rural municipalities. This chapter adds to these concerns the problem of measuring rural income, and whether using only declared income as a criterion captures the severe deprivation level of this specific group.

Second, in Chapter 5, federal staff cited the local administration's responsibility for searching for the persistently poor ("active search"), and for ensuring that the local *Cadastro* is updated. This chapter shows how PIR and PNIR municipalities are not necessarily well equipped to conduct these procedures. The costs of intra- and inter-municipality remoteness are generally borne by households.

Third, Chapter 5 shows that federal staff have given serious consideration to the quality of the *Cadastro* database. That discussion also showed that local administration staff have pointed to the difficulty of receiving complaints, either from ICS or from households, about beneficiaries who should not be receiving benefits. There is a potential conflict between community participation and ensuring a quality *Cadastro,* further explored in Chapter 8.

Chapter 5 also raised concerns about *Cadastro* errors and the possibility that eligible families might be excluded. This chapter confirms the system problems, and adds further possible reasons why the eligible poor might be excluded, such as documentation and information problems. It also uncovers issues with relationships between the various levels of government, such as the federal government's lack of response to inquiries from the local administration, and lack of trust between local administrations and households.

Interestingly, the fact that the BF selection happens at the federal level gives local CRAS staff more autonomy in implementing this policy, by enabling it not to fall prey to political pressures. However, despite attempts at the federal level to make the BF programme "politics-proof" , this analysis shows that local politics interfere with

the efficient administration of the programme through other mechanisms, such as contracting practices.

Of course, there are several benefits gained by Brazilian society through the BF. Never before have the uninsured informal working-age rural poor had public income support, although the BF is not a legal right. The programme has also given more public emphasis to, and generated more debate about, the role of social workers and social assistance benefits in municipalities. It has also pushed local administrations to invest in public services to cope with the BF implementation process, created links to other programmes, and provided opportunities for the population to address other needs.

The interviews with local administration staff recorded in this chapter have shown that the ways in which the BF implementation is conducted, particularly in PIR municipalities, does not favour the efficient registration of the persistently poor; and neither does it give them priority. Registering the persistently poor in rural remote villages is costly and not often conducted, although some of the local administrations do make an effort to do so. In the following chapters, I will introduce the municipal context, as well as investigating how the persistently poor themselves take part in the BF implementation process.

7 "A LAND WHERE THE CHILDREN CRY AND MOTHERS DON'T SEE IT": CONTEXTUALISING THE EFFECTS OF REMOTENESS ON THE LIVES OF THE PERSISTENTLY POOR

If my son stops working [to study] his wife will die of hunger. (…) Die! Because there is no other solution. (…) He can't study [at night] because they live in a farm. (…) Here, there is this idleness. Because, actually, this is what I am telling you, if it wasn't for this Bolsa Família, people would feel sick… sick of starvation, believe me! Here, there is no solution for this place. This is a land where children cry and mothers don't see it. Indeed, there is no solution! (045i NBEN).

7.1 Introduction

Isolation, abandonment, disregard and hopelessness were feelings were often expressed by the persistently poor living in the remote rural villages I visited. The influence of location is captured in the above quotation, which represents households' daily struggles: the mutually exclusive decision to work or get an education, the reduced number of job opportunities, the difficulty in attending school due to location, the need for government assistance to survive – issues tied up with the land in which they live.

The statement in the title of this chapter highlights the sense of invisibility that permeates the lives of the persistently poor. Local and federal governments do not "see" what is happening to the sons and daughters of this land. At the same time that the persistently poor attempt to make ends meet by several means, they recognise that the solution does not rest entirely in their own hands.

Before answering RQ2c in the next chapter, it is important to investigate to what extent location has influenced and continues to influence households' lifelong decisions. It is necessary to have an in-depth understanding of the context in which the programme operates. Households' decisions – contextualised in the place where they live – influence programme effectiveness and the success of programme outcomes.

This chapter, therefore, provides a detailed account of the similarities and differences between the two types of poor rural municipalities and villages. I investigate structural bottlenecks in the operationalisation of the BF programme in terms of

access to and provision of basic services, such as water, sanitation, education, health and transportation. Thus, I address the following question "**What is the context underpinning households' participation in the BF programme in PIR and PNIR municipalities?"**

As addressed in Chapter 2, there is disagreement between, on the one hand, the proponents of CCTs (who argue that CCTs are specifically targeted to the persistently poor due to their long-term strategy for investment in children), and on the other hand, RRA experts (who point to the lack of public services in those areas). Thus, this chapter empirically investigates the existence of the services needed to implement the programme for the persistently poor in RRAs in the Brazilian context. This analysis is relevant as the BF is targeted primarily to the persistently poor and is conditional on service attendance.

Furthermore, there is a general claim that the benefits of enrolling in the BF programme outweigh the costs, given that the benefit is in cash and non-contributory, albeit conditional. Plus, persistently poor households urgently need benefits like this one. It may well be that the cash incentive is greater than the costs associated with registration for the programme. However, this chapter and the next shed some light on some unobserved variables that precede the act of registration, as well as hidden factors that could potentially influence household compliance with the programme.

This chapter is based on a qualitative analysis using household interviews, protocol observations, service profiling, field notes and maps. I was able to draw overall comparisons between the ten villages I visited, grouped according to remoteness, as explained in the analytical framework in Chapter 3. I present the findings of this chapter according to the two categorisation of remoteness: section 7.2 discusses the findings related to inter-municipality remoteness; and section 7.3 addresses the findings related to intra-municipality remoteness. Section 7.4 concludes this chapter.

7.2 Inter-municipality remoteness: a municipal-level analysis

7.2.1 Livelihood strategies, assets, trust and stigma

The location of a rural municipality determines its soil quality and precipitation levels, and this has an undeniable effect on the lives of the rural poor. Three of the four case studies were located in the semi-arid region, and lack of rain during the rainy season not only results in crop failure but also in unemployment for rural workers.

Households are feeling the effects of climate change. Interviewees reported that there had been a noticeable deterioration in soil and water conditions. They had had to change the crops they planted and crop yields had been reduced. They no longer grow what they used to.

One household strategy to reduce vulnerability is to accumulate assets by investing in livestock. This is recommended by the asset-building framework, which focuses on the importance of asset accumulation and consolidation as the way to exit poverty (Bebbington 1999; 2007a,2007b,2008). However, for the persistently poor, accumulating assets is difficult. The reported reasons are lack of rain to grow pasture, lack of food for the animals, and lack of facilities to enclose the animals.

Opportunities to engage in small farming are also limited. There are few opportunities to own small plots of land because of large inequality in land ownership. In addition, farmers prefer to sell the larger plots, which are generally bought by outsiders (045i NBEN).

There are also limited opportunities for informal working arrangements to farm somebody else's land (e.g. dividing the cash crop between farmer and owner). This is a consequence of the mistrust between rural workers and landlords, the result of a complex history riven by violent conflicts over land. It is important to introduce some key elements in order to understand why informal working arrangements were limited in the areas studied.

Legally, the 1988 Constitution (5th article) protects the right to private property, but at the same time it links that right to the "social function"[104] of the land; thus, it is not an absolute right. In addition, Brazilian law allows for the possibility of acquiring legal title to land through 'adverse possession' under conditions prescribed by the Civil Code (*Código Civil Brasileiro*), such as living and/or working on the land for a certain length of time.

The relationship between landlords and rural workers, thus, is filled with mistrust, and the workers are stigmatised by landlords, who believe they are 'adverse possessors'. This was confirmed by first-hand accounts of farmers feeling embarrassed to ask to work informally on somebody else's land. Even if they do overcome their embarrassment, the resulting agreement is usually servile in nature. It is based on the expectation of gratitude towards those who own the land and are "favouring" them. Stigma, thus, is reinforced by the rural workers themselves through their sense of inferiority in this working relationship.

PIR municipalities, with reduced opportunities for livelihood diversification through non-farm rural employment, should have higher BF participation rates than PNIR municipalities, although this was not what was found by the research reported in Chapter 4. Even so, the conservative Brazilian media and society claim that the BF is a poverty trap, that it is an "alms grant", and creates dependency and discourages work (Folha 2008,2013). This is despite the fact that many areas have low opportunities for work.

The 'dependency' discourse continues, despite evidence to the contrary. For example, Teixeira (2010) shows that the average effect of the BF on the probability of working is nil, and that only a marginal reduction in the hours of work can be attributed to it. Medeiros *et al.* (2008) argue that the average BF benefit represents an increase of 11% of the family income, which is not enough for a negative incentive towards work. This chapter adds to this literature by showing that it is not the case that the BF discourages families from working. On the contrary, there are structural reasons why there are limited possibilities for work for the persistently poor in the

[104] The social function of the land is understood as the adequate and productive use of the land, according to environmental law (Art. 9, *Lei No. 8.629, de 25/02/1993*).

remote rural villages of PIR municipalities, such as little or no access to non-farm rural work, poor soil quality, lack of irrigation, and little or no ownership of land.

The Government of Brazil tried to address the issue of lack of assets raised by the "dependency" discourse by promoting microcredit. This initiative is in line with the World Bank's "productive role of safety nets" (World Bank 2009b,2012), whereby the BF is supposed to be used as a minimum safety net to empower households to take on higher risks, resulting in higher earnings. When I asked households whether they had ever used microcredit, I was surprised to find that the persistently poor, who mostly need these initiatives, did not want to take them up. They considered that the risk involved in accepting them was too high. The BF, for the persistently poor, does not seem to fulfil this productive role.

This finding leads us to ask whether promoting micro-finance by itself is an adequate public policy for the persistently poor. More appropriate policies would involve the integration of market-based microcredit initiatives with social assistance and rural development programmes (including technical assistance), but these other initiatives were non-existent in these municipalities. Other considerations could involve an understanding of how geographical location affects market opportunities and flows of material and human resources. There is a need to design policies specific to each region, which would also include communal infrastructure, such as pastures, pigsties and irrigation.

7.2.2 The labour market

In both PIR and PNIR municipalities, the high numbers of unskilled workers and the limited number of formal job offers creates an informal and precarious job market, resulting in high levels of vulnerability. Labour is seasonal: farming activities during the rainy season, and non-farm livelihood strategies, such as bricklaying, sewing, house-cleaning, wood-chopping, during the dry season.

PNIR municipalities have stronger links to nearby urban economies than PIR municipalities. This is the impact of location on the labour market, particularly for non-farm employment opportunities.

Proximity to an urban municipality produces a constant flow of workers. In PNIR municipalities, households reported that they migrated weekly to the nearest urban municipality for work purposes. The local administrative staff of PNIR municipalities gave the same information, reported in Chapter 6. Households, nonetheless, have the opposite migration flows. Households work in the nearby urban municipalities during weekdays and return to PNIR municipalities on the weekends. Unlike PNIR municipalities, PIR municipalities have reduced work-related migration. PIR households are mostly unable to travel weekly to nearest urban municipality to get a day job.

Another rural-urban linkage effect of the proximity to an urban municipality is the strengthening of the local PNIR economy. Interviewees send money back to PNIR economies, and this fuels local businesses. There is also the increased participation of PNIR workers in the urban municipality's economy. The interconnectedness of these two economies is evident. This is not the case in the economies of PIR municipalities, with less frequent flows of remittances.

In PIR municipalities, households emphasised the role of political connections. The lack of job opportunities (even for those with high-school degrees), the hi-jacking of local jobs by the political contracting practices, and the weak labour market conditions, make the situation of the persistently poor extremely difficult.

> There is no job offer here; the only job offer here is through the town hall (037i NBEN).
>
> Sometimes we know that the opportunities of some of the people here don't compare to one of ours, they have it here and ours don't, that hurts inside and you see one of yours that is hardworking with the possibility of succeeding here and s/he doesn't ... it is hard, you see the risk that your son faces and … [the others] have no risk, the other has his monthly wage … because the other has a "step-father", a "step-mother" ... it is hard, sister … here, who doesn't know what it is to live here, never will (043ii NBEN).

The weak links with nearby markets due to the isolated location of PIR municipalities result in reduced liquidity in the economy. Interviewees reported that even if they had a job, this did not guarantee that they would get paid. For example, an interviewee started her own bakery business, but she had to close it down due to lack of payments from locals, including the mayor's office.

These findings again throw doubt on the claim that the BF causes dependency. The persistently poor living in PIR municipalities have little access to job opportunities, so it is not the case that the BF creates dependency, or that BF beneficiaries are opting out of the labour market. Furthermore, the findings also throw doubt on the claim that the persistently poor graduate from the BF through labour market inclusion. The belief that the BF need support a family only temporarily until it finds its way into the labour market, is challenged by the job-market structure in areas of persistent poverty.

7.2.3 Migration as a livelihood strategy

In both PIR and PNIR municipalities, households use migration as a livelihood strategy. However, migration patterns differed in types and frequency, resulting in different flows of people across space. I was able to observe three types of migration flows: (i) work migration; (ii) family migration; and (iii) network migration.

Work migration was partially addressed in sub-section 7.2.2. The proximity of PNIR municipalities to urban areas enables weekly migration, whereas the isolation of PIR municipalities results in longer periods of out-migration in search of work. The out-migration of working-age household heads in PIR municipalities results in what Bird *et al.* (2002) call "residual populations" – of women, the elderly and children.

The income of PIR families reported by interviewees mostly consisted of remittances, social transfers and social pensions. It may not be entirely accurate to identify persistent poverty with areas where the residual population is largely the elderly. Researchers have found that the social pension acts as an "insurance against extreme poverty" (Osorio *et al.* 2011b p.49). This statement uses the income threshold of extreme poverty to justify how social pension can be considered as an insurance, however, the remaining analysis of this chapter will demonstrate how factors other than income can also reduce living standards in PIR municipalities. Social pensions in the rural isolated villages studied may still be an insurance against extreme income poverty, but the population still face the effects of severe and long-term persistent poverty.

The second type of migration flow is family migration. PIR households tend to migrate more frequently, either going to a different rural village within the same municipality, or going to another municipality. This migration pattern differs from that found in PNIR municipalities. Household heads of PNIR municipalities are more stable in their migration patterns. Either it was the previous generation who migrated to the area, or they themselves migrated to the area several years ago.

Lastly, the third type is network migration to metropolitan areas. The idea of "trying to make a go of it" in a major city is present in both types of municipality. The content analysis showed that the distance to the metropolitan area was not the main factor driving rural out-migration, but instead (i) existing informal networks in the metropolitan area, and (ii) subjective links to the local community and land.

Having an informal network in a major metropolitan area could cut down the household's costs of moving and lodging. Sometimes, however, these networks are also stretched financially and are unable to assist with the costs of another PIR member. At other times, neither these networks nor the lack of opportunities in rural villages are sufficient reason to out-migrate. Humans, as social beings, have links with community, family and the land in which they live. Despite the hardship the persistently poor face, some people choose to remain living in rural villages.

> I was born here, my dad was born here, my granddad was 99 years old when he died, he was from here, son of this land. This is a place that people that come from outside cannot understand why we love this place, because there isn't much infrastructure, but this is a place that my family, my granddad, my dad, my mum, everyone was born here, it is a good place to live, it is a quiet place, a friendly place (036n BEN).

PIR and PNIR municipalities have different patterns of migration flows. PNIR municipalities have fast, varied and continuous flows of people. Conversely, PIR municipalities have slow, erratic and intermittent flows. These migration flows and the lack of local job-market opportunities have an impact on household composition, leaving residual populations in PIR rural villages when the whole family does not out-migrate in search of better opportunities.

Migration undeniably influences BF implementation, affecting registrations, fulfilment of conditionalities, and updates of the *Cadastro*. Households living in PIR

rural villages migrate more often than those in PNIR villages. This results in uncollected cards, duplication of *Cadastro* entries, extended periods of school absences, and so forth. It could even mean that the household's benefit is cancelled. Its effects were discussed in several reports from both the local administrations (Chapter 6) and the households (Chapter 8).

7.2.4 Transport to the nearest urban centre

The availability of transport to the nearest urban municipality influences local BF implementation, as discussed in Chapter 6, section 6.3.3; and it also influences a household's living conditions. While PIR beneficiaries in my sample travelled between 90km to 130km to activate their cards in the nearest CAIXA, PNIR beneficiaries travelled between 30km to 40 km. So PIR beneficiaries have to travel further distances and incur higher transportation costs, as well as being the most likely to live in persistent poverty and to have fewer job opportunities and less savings.

Although interviewees in both PIR and PNIR municipalities regularly reported that services were lacking or of bad quality, the inhabitants of PNIR municipalities had better access to and greater variety of educational and health services in the nearest urban municipality than those living in PIR municipalities.

> there is no resource for me to go to university because it is very difficult due to transport issues … to go to university in municipality X [126km away] and to return home … The only faculty nearby is there, so one has to get transport from here to the local town, from the local town to municipality X ... [transport leaves] every day at 5pm and only returns at 1am ... It is difficult to return to the village from the local town at 1am because of the road conditions [unpaved, unlit], even the roads do not help us to come to the village, you are driving around, you can see it (029i BEN).

Reduced access to transportation in PIR municipalities and its higher cost demonstrates higher levels of vulnerability in these municipalities in relation to health services. However, both municipalities are very disadvantaged in relation to specialised health services like neo-natal intensive care or surgery, as these services are offered only in regional urban municipalities. In this case, distance is not the only key factor in health service attendance, but also whether or not the household has contacts in the town, i.e. network migration.

The BF literature doesn't explore the links between rural and urban municipalities, although these links are very important for investigating the extent to which the BF is effectively improving access to social services. As previously noted, BF implementation requires institutions like CAIXA or *cartórios*, and these are located in urban municipalities. Health and educational services, beyond the conditional school attendance and pre-natal checks, require transportation to the nearest urban municipality or to a regional urban centre.

7.3 Intra-municipality remoteness: a village-level analysis

The themes discussed below show how the quality of local services, and their presence or absence, influence the daily lives of the rural poor and affect the implementation of the programme. Intra-municipality remoteness has consequences on the flows of information, people and networks. Remote rural villages have slow, irregular, less dense flows; and non-isolated rural villages have fast, regular, denser flows. These flows reflect the backbone infrastructure of services.

Box 1: Protocol observation and fieldwork notes of an isolated rural village, PIR municipality

This rural village is situated 70 km from the PIR town hall. The distance between the PIR municipality and the nearest urban municipality is approximately 126 km. The roads connecting the village to the town hall are unpaved and full of pot holes. It took me three hours from the local town to arrive to this village. I was able to stay in the village for two weeks. There are no hotels; I stayed with a household, thanks to a previous relationship I built when I was at the local town. This village is cut off from the local town during the rainy season. The federal government provided each house with solar energy. The previous local government built a brand-new health centre, which was currently not being used – neither doctors nor nurses were willing to live there. The school operates with little pedagogical support and I heard several reports about lack of free school meals. Solar panels are not enough for a family to have a fridge, for the school to operate their 10 computers, or for the health clinic to have their vaccination room. There is no mobile signal in the region. Private transportation to the town hall runs three times a week, leaving early morning and returning mid-afternoon. Water is pumped from the river that runs close by. The majority of the houses have no bathroom facilities. Human waste is easily washed into the river. The local health agent reported that the most common complaint relates to the drinking of contaminated water from the river. The sight of mud houses, with the latest solar energy technology, along a beautiful but contaminated river, is disturbing.

7.3.1 Sanitation and housing

Brazil is one of the ten worst countries in the world in relation to sanitation, with seven million Brazilians with no access to toilets and hence having to defecate in the open (de Albuquerque 2013). Despite significant progress made in the past decade in sanitation, populations in the North and the Northeast of Brazil are still the most deprived. Not having a bathroom at home is not only a humiliating situation, it also poses several health risks. During a visit to Brazil, the United Nations Special Rapporteur on the human right to safe drinking water and sanitation said that,

> the low investment in basic sanitation results in high costs in public health, with approximately 400 thousand people admitted with diarrhoea in 2011 ... the majority of them were children between the ages of 0 to 5 (de Albuquerque 2013 item 5).

Some villages have rubbish collections, although the rubbish is often tipped in inappropriate places. In villages where there is no rubbish collection, households still burn rubbish, and this poses other types of environmental and health risks.

The rural poor live in overcrowded houses with poor housing structures (see Box 2) and their property rights are insecure. The majority of the interviewees reported that they owned their own houses, although contracts were informal and people did not have title deeds.

Some rural workers still live as 'residents' (*morador*). They are not tenants, but occupants of a house in the land where they work. This is an informal arrangement offered by the landlord. Residents usually do not pay rent, but they pay the housing bills. They have no rights in the house and their continued occupancy is entirely dependent on the continuation of their work. This type of housing arrangement does not depend on remoteness, but instead on the local labour conditions.

It is also a highly vulnerable arrangement, encroaching on the rural workers' private lives and their freedom to contract. Interviewees often expressed uneasiness about living as residents, largely because of the mistrust between the landlord and rural worker mentioned in the previous section.

> Me: Do you mind living as resident?
> I don't think it is bad, as the landlord is not one of those who are not here every day, right? But having our own little place is better, right?
> Me: What can you do at your place that you can't do here?
> well … so many things … like, my husband when the landlord wants him to work he must go and if we have our own little place, I think he doesn't need to. He can work for whoever he wants to (038n NBEN).

This type of living arrangement is indicative of the limited support for public housing in Brazil, as is the widespread reliance on living arrangements with family and relatives. In 2003, the Government of Brazil increased the amount of housing subsidies in rural areas through CAIXA's National Programme for Rural Housing (PNHR)[105]. However, the PNHR has been criticised for the high home loan deposit required, and for the limited budget available for the programme (Rover & Munarini

[105] Programa Nacional de Habitação Rural.

2010). During fieldwork, there was no report of PNHR houses among families interviewed.

Box 2: Housing conditions - vulnerability of the persistently poor in PIR municipality

Report from a 28 year-old mother (she is uncertain of her age) of five children, husband works in daily contracts (two days without working), less than 4 years of formal education, recent beneficiary of the BF, lives in an isolated poor rural village (039ii NBEN).

Me: Do you have a toilet in your house?
No.
Me: and electricity?
Yes.
Me: So, do you have a fridge?
No, no I have no white goods, nothing, nothing. If you want you can walk in and see it. I only have this old radio, that doesn't even work properly and, well … I have this television, which is for the children. That's how I hold them at home …
Me: Do you pay rent?
No, this [house] is mine, I bought it … but I will complain … I ask "for what?" I could have bought things for my children but I bought this house instead. A house that … look … it needs roof, downspouts … the house is almost collapsing, it is even sinking … I didn't buy a couch, I didn't buy a fridge, I don't have a cupboard, I don't have anything … I have nothing … what I have is for sleeping and this television. I took away money from eating, I took away from our mouths to buy this house for them.

7.3.2 Fuel and electricity

All the villages I researched had energy provided, some of them only recently connected to the grid. This may be the result of the Federal Programme Electricity for Everyone (*Programa Luz para Todos*). In 2013, this programme celebrated ten years of implementation with 15 million rural households connected to electricity (MME 2013). Remoteness can have an impact on the type of energy provision. The usefulness of the energy from solar panels is discussed in Box 1.

Households rely on firewood and gas for cooking purposes. For some households, firewood is easily found nearby; for others, the geographic characteristics of the area mean that finding and fetching firewood is not an easy task.

7.3.3 Water supply

There is a vast need for improvement in the public provision of water services to rural municipalities and villages, particularly in the semi-arid region of Brazil. Problems with water quality and the continuity of services were constantly reported. Although the government has tried to scale up the "One million cisterns programme" from the Non-Governmental Organisation *ASA Brasil*[106], there is still room for improvement (de Albuquerque 2013).

All the rural villages I visited still lacked a reliable water supply. There are two broad water-supply strategies: government-led or household-led. The local government sometimes purchases water pumps and installs them in the local rural villages. The fuel for the pump is usually dependent on the local administration. The local administration may also purchase the service of a water-tank truck (*carro-pipa*) to fill the local school's water tank, which is also used by all the households nearby.

Household-led strategies are all dependent on their informal connections. They generally walk to collect privately-owned water from dams or tanks. However, households have different coping strategies depending on what they need the water for. Better-quality water for the purposes of cooking and drinking is obtained differently from the water used for washing clothes, bathing or cleaning houses. Sometimes, they fail to obtain good quality water to drink and they use what is available to them. One interviewee told me that their drinking water is popularly known as "chocolate water".

The type of water-supply strategy used seems to depend on remoteness. Households in PIR villages tend to rely more on time-consuming household-led initiatives than the households in PNIR rural villages, who are more likely to receive government support. Government-led strategies cost more to reach remote rural villages, and demand better logistics. This means that the persistently poor in isolated villages spend more time fetching water for survival, in addition to fetching firewood.

The rural poor lack safe drinking water, even though it is central to survival and to upholding basic human rights. Without safe drinking water, there is the possibility of

[106] *Articulação no Semiárido Brasileiro*.

falling prey to informal arrangements in exchange for water, possibilities that underline the unevenness of power in social relationships. Sometimes this takes the form of exchanging votes for survival. Once again, the hardship of persistent poverty in rural areas means a lack of dignified living conditions, potentially leading people to negotiate aspects of their freedom in order to meet basic needs.

Box 3 and Box 4 compare isolated with non-isolated rural villages, using the households' own words.

Box 3: Water supply in non-isolated rural village, PNIR municipality

Report from couple, 26 and 20 years old, small farmers, husband also works as woodchopper, 2 children, receives the BF, less than 4 years of formal education, living in PNIR rural village (027nn BEN).

Me: Where does the water come from?
There are water tank trucks that fill the water tank at the nearby school. People get it from there …
Me: Is there always water there?
Yes, there is, because the Army fills it in and nobody tells the Army what they can or can't do.
Me: and when wasn't it filled by the Army …
It was bad. It was worse. We always had water shortages.
Me: How often do you go there to fetch water?
Two, three times a day.
Me: Is this water for your consumption, is it to drink?
Yes, it is.

Box 4: Water supply in isolated rural village, PIR municipality

Report from 51 years old, mother of 11 children, husband is rural pensioner, small farmer, illiterate, non-beneficiary, living in PIR rural village (043ii NBEN).

Here, we get water from the dam. The dam here, close by, we don't drink or cook with this water, we are afraid of doing so because the majority of the people of the village bathe in the dam. So, there are people with good health, with ill-health, there are people with all sorts of health. Anyways, not everyone has a bathroom … When we get water from there, as people say, it is only to wash the necessary, and you don't drink it or cook with it.
Me: How do you do it then?
When water tank trucks come they put water in tanks, so people who have a tank, like that girl who built one now, that's where we get it from … But when we can't get water to drink from tanks, the water is not very good to drink from, look at this water here, this is the colour of the water that we get from a mud hole from that road … this is the best mud hole on that road … it belongs to so-and-so land, who is the father of the lady who owns the local shop.
Me: Does he charge anything?
No, this one he doesn't charge. We walk under his fence, fill in the pots and come back, then we have water to drink, as one can say, water that we can drink, even if it is thick, even if it is new it is from this mud hole. If it is from the water-tank trucks we drink it normally, we fetch it from the neighbour who has a tank or from so-and-so, who has the goodness [of heart] to make available their water for us …
Me: How do you fetch this water?
We carry it in a tin. My daughter carries a small blue barrel in her bike and I or my other daughter carries a water bucket on our heads.
Me: How long do you walk?
We cross the dam there … cross the road, go up and when it gets up there, there is a mud hole – this is the poor person's life, sister.
Me: About half an hour?
About that.
Me: How many trips per day?
Sometimes we do it twice, three times a day…

The fact that some households still have to fetch water may have some unintended consequences for compliance with the BF programme. For the persistently poor, having to cope with the BF conditionalities of school and health attendance, on top of the need to fetch water and fuel and other daily household chores, puts additional strains on the family's survival. When children are at school, mothers cannot count on them for help with the daily household tasks. The extra burdens imposed on

women by conditionalities was also identified by Molyneux in her studies of the CCT programme in Mexico (2007,2008).

7.3.4 Local commerce

Given the distance to the local town, and the costs of time, price and logistics, the majority of the persistently poor in the isolated rural villages of PIR municipalities reported not shopping at the local town, despite the fact that goods were cheaper in the town. They were more likely to buy their groceries from the local village shop, even though prices were higher. These higher prices are the result both of transportation costs and of the local shop's monopoly.

Another important reason why the persistently poor in isolated villages shop at their local shop is the possibility of credit. Although BF has helped beneficiaries to increase their credit in shops, some beneficiaries reported not being able to fully pay all the bills they had in their local shop. Large numbers of dependents, limited alternative sources of income, and the meagreness of the benefit, all reduce the potential of the BF to have a positive impact on the lives of the persistently poor. As one interviewee said:

> Yes, before people starved and today we can do something with this *Bolsa Família*, because it is the following, one can buy up to the limit s/he receives, right, or more, because … these shops there, we buy it from them but we don't know, we don't tell them if we will pay in 30 days, we don't, and no one knows when we will pay too, right? Sometimes, some of us tightens our budget a bit and pay, others don't and when it starts to tighten on the other side, they [local shop owners] turn their backs, until god blesses and soon we can turn around and face the shop owners and pay them, right? But here, economy runs on cattle ranging, this place is weak on jobs (045i NBEN)

The quote above also shows the dynamics of debt repayment and the potential for stigmatisation. The BF beneficiary may be stigmatised with the undesirable trait of not being a reliable buyer – a bad risk, resulting in discrimination and a lowering of self-esteem: the interviewee says that shop owners "turn their back" on beneficiaries if their debt is carried over for months, and that beneficiaries cannot "face" them until the debt is paid. It is, therefore, not surprising that in all the case studies there were reports of shops owners illegally keeping the BF cards and passwords, and using them to pay for people's purchases. Whether this was a way for the poor to

demonstrate their willingness to pay the carried-over debt, or whether it was a requirement by the shop owner to avoid undesirable unreliable clients, it indicates an uneven relationship between shop owners and BF beneficiaries. Once again, the end result is that beneficiaries trade aspects of their freedom to meet their basic needs.

The rural poor in the villages of the PNIR municipalities enjoyed certain benefits because of their location. They often went to the town to buy their groceries, and they were able to ride their bikes and thus to save money. Some of them were able to go to the nearest urban centre to purchase cheaper school material for the whole year.

Comparing PIR and PNIR rural villages produces the following findings. The heterogeneity of rural areas throws doubt on the assumption that the real value of benefits is higher for the rural poor than for the urban poor. This may be the case for those living in non-isolated villages in PNIR municipalities; but the persistently poor in PIR municipalities only have access to one local shop, and the prices of the goods they buy there are much higher than in urban areas. Thus, policy suggestions like adjusting the transfer size taking into account spatial price differentials (Higgins 2012) – based on the *average* price differentials for all rural areas of the Northeast – will most likely harm the persistently poor the most.

7.3.5 Education services

The schools in both PIR and PNIR municipalities had problems with their physical infrastructure and human resources. Some of the schools had improvised teaching rooms in order to accommodate all students. Only a few of them had sports ground or access ramps for students with disabilities. However, there was a noticeable difference between PIR and PNIR schools. If compared to schools in PNIR municipalities, schools in PIR municipalities have more under-qualified teachers and limited teaching materials (some books, CDs and DVDs). They lacked basic infrastructure such as safety area for the children to play, fans, and proper pavement.

In general, education services in PIR and PNIR municipalities do not go beyond the high-school years. If they want to undertake tertiary education students must go to another municipality. The implication for inhabitants of remote rural villages in PIR

municipalities is that advanced study is nearly impossible if they stay home, and the result is migration.

Remoteness is even more of a problem for the persistently poor who rely on a nearby rural village for the first years of schooling (1st to 4th grades). The town hall does not always provide transportation, and the persistently poor have to rely on bicycles or walking to get to school. Although my interviews did not contain many cases of young children walking to school, there were some, and these children were very young. This raises several concerns about their health and safety, as reported below:

> These little ones that live in that area, some of them their mother bring them to school, she rides her bike; others come by foot, they walk six kilometres by foot.
> Me: By themselves?
> By themselves, sometimes the mum brings them, but here in the region, there is an enormous difficulty with transport (029i BEN).

When children reach the 5th grade, they move to the local town schools, and the municipality generally provides public transport. However, remoteness has an impact on the time spent on the bus. Students from non-isolated rural villages spend less time on buses, and have alternative means of transport to school. On the whole, though, rural education is still a matter of the first four years of schooling, although some rural village schools I visited did offer services beyond the 4th grade. This finding of the fieldwork reinforces the descriptive statistics of the 1990s, 2000 and 2010 relating to rural education (IBGE 2008c,2010b; World Bank 2003).

7.3.6 Health services

Complaints about lack of or reduced services abound in the interviews. This includes doctors, dentists, emergency facilities, ambulance, specialists, and basic service infrastructure.

> One starts working here, another one leaves and there are days without doctors, there are weekdays that there is no doctor. I think that they think one only gets sick on Mondays, Tuesdays and Wednesdays, the other days no one gets sick. I think that every day there ought to have doctors in countryside municipalities. If someone gets sick they need to go to municipality X (regional urban municipality 68 km away). To be seen there, one needs a referral from a doctor here. If there is no doctor here, then it is difficult, right? (046nn NBEN).

These complaints about high turnover among health staff and about the practice of contracting doctors to work for only a few days a week, resonate with the local administration interviews in Chapter 6.

Prenatal care and caesarean and premature births are particularly problematic for the population in these municipalities. The persistently poor living in isolated rural villages of PIR municipalities face a stark dilemma:

> Me: Do you know cases of women dying on the road to municipality X (urban municipality126 km away) to give birth?
> Not that I know of, but of babies, yes, there are cases of babies dying because their time to be born has passed, these types of things (041i NBEN).

The coping strategy most often employed by the rural poor involves informal networks of friends or relatives. Visiting families lodge in their relatives' houses while they are being treated. Another strategy is to rely on traditional remedies to ease some of the symptoms of their diseases, so that they can "avoid leaving the rural village in a hurry" (032i NBEN). I even interviewed an elderly midwife (*parteira*), who still delivers babies in the isolated rural village of a PIR municipality.

Box 5 below shows how the persistently poor in a PIR municipality cope with the lack of health services in their local town.

Box 5: Health infrastructure and transportation in a remote rural village, PIR municipality

Report from a 28 year-old, mother of six children, housewife and small farmer, works for others too (farming), less than four years of education, BF beneficiary, lives in an isolated poor rural village (030ii BEN).

Me: So she went to municipality A [urban municipality at 588 km away]…
There is no neonatal ITU in municipality B [94km]
Me: So, for how many years does a doctor work in this village?
One, two years … On Mondays and Wednesdays.
Me: What if you get sick the other days?
There is the ambulance … [that] takes us to the local town and if needs be they take us to another municipality … Because X-rays, ultrasound, mainly X-Rays, because ultrasound you can do it at municipality C [38km], which is far, but nowadays access is easier.* But X-ray, only at municipality B [94km] …
My sons have broken their bones four times … We had to arrange a car to municipality B, we had to hire a car. The smallest child broke twice and he had to undergo surgery. Then, it was more difficult, he had to go to municipality D [206 km] … I cannot tell you how long it took us to get there, because there was no transport straight to D [206 km] … so, we hired a car and went straight to the local town … Since he broke very badly, from the local town we went to municipality B [94km], from B to D.
Me: and you hired till B [94km], do you remember how much the car owner charged you?
He didn't charge us anything … we helped him at his farm so he didn't charge us anything.

** An asphalt road was recently built to connect the local town of this PIR municipality to the state highway.*

Municipal health infrastructure has several implications for the BF implementation. First, it may take several days, or even weeks, to treat a sick child, depending on the distance and the disease, and this means lower school attendance. Then, there are cases where the family needs to migrate temporarily to another municipality for treatment. This could mean that the BF administrator has difficulty locating them, putting their benefit at risk. Lastly, lower school attendance for long periods of time due to illness results in lower educational attainment.

7.3.7 Influence of local politics on service provision

The influence of local politics on staffing, contracting practices, and the dissemination of information were discussed in Chapter 6. This influence on the delivery of public services is particularly strong in the remote rural villages of PIR

municipalities. The lack of a strong economy in these regions allows local elites to exercise political and social leverage. These elites are elected on promises to attract financial and human capital, to strengthen the economy and to deliver services.

> Dentists don't come here … only during election time. They promise, then after a while, nothing changes, nothing has been fixed (032i NBEN).

Interviewees said that when the mayor thinks that a certain rural village voted against him, there is a tendency to deprive them of services. The favouring of political constituencies is not an unsubstantiated claim. However, when this happens in remote villages, the persistently poor are particularly affected, given their high levels of vulnerability.

> it was like that, when this person was almost dying only then they would call the mayor for her/him to decide [whether or not to send the ambulance] … if you voted for the other party, you had to pay for private transportation yourself, this is how it works (033ii BEN).

This means that the poor try to cooperate with the local elite as a survival strategy, thus fuelling the unequal and clientelistic social relationships based on votes being exchanged for favours. This was also mentioned by local administration staff (Chapter 6). Household interviewees said:

> So, for example, in two years time if another mayor is elected in the place of this one … I will lose my job [as a teacher], because people that voted for the new mayor and the mayor him/herself will not accept that I remain in this place, unless I were a public servant [and not a contractor] (029i BEN).

Ideally, a social protection system would protect beneficiaries from having to enter into unequal contracts, bargaining aspects of their lives in exchange for getting their basic needs met. Although the BF has started this process, there is still a long way to go to address the complex needs of the persistently poor.

In sum:

What is the context underpinning households' participation in the BF programme in PIR and PNIR municipalities?

Location of the PIR and PNIR municipalities – inter-municipality remoteness – influences the set of choices households can choose from to effectively take part in the BF programme:

- Geographical characteristics, such as soil quality and precipitation levels, together with property ownership and informal farming arrangements, influence any possibility the rural poor might have of subsistence farming and asset accumulation. These geographical and institutional factors influence the possibility that the BF can be used as a stepping-stone for people to take on larger risks and embark on higher return activities.
- Because of their location, the rural poor in PNIR municipalities have more chances of migrating weekly to urban areas, and of enjoying opportunities for livelihood diversification and non-farm employment, than the persistently poor in PIR municipalities. The latter are more reliant on political connections within their municipalities in their search for jobs. The structure of the labour market and these locational factors influence the possibility that the BF beneficiaries will "graduate" from the programme through labour market inclusion.
- There are differences in migration patterns and migration flows between PIR and PNIR municipalities, resulting in different population dynamics. The persistently poor in PIR municipalities live in villages with residual populations, or recurrently migrate in the search for work opportunities. They may be disadvantaged by this migration pattern and have their benefit cancelled because their details are updated less often in the *Cadastro* and their conditionality compliance is intermittent.
- Transportation to nearby urban municipalities is more difficult for the persistently poor, and is a major reason for their reduced access to school and health services. Transportation also has an effect on registration levels when people have to travel to institutions outside their rural municipality.

Location of the rural village – intra-municipality remoteness – has an effect on the daily lives of rural poor:

- The persistently poor living in the remote rural villages of the PIR municipalities are highly vulnerable due to few or no services such as sanitation, quality housing and access to clean water.
- Local politics influences service provision, and this affects remote rural villages more severely.

- Dependence on local shops in isolated rural villages transforms the buyer-seller relationship into an unsustainable and long-term contractual debt. Unequal power relationships result in stigmatisation, and in some beneficiaries handing over their cards to local shop owners.
- Poor access to and quality of health and educational services, particularly in poor remote rural areas, reproduce the cycle of persistent poverty, resulting in lower levels of education and health.
- Children in isolated rural villages spend lengthy periods travelling to meet conditionalities. The conditionality aspect of the benefit may pose additional strain on the intra-household division of labour , because it reduces the possibility of children helping their mothers in household tasks, particularly in remote rural villages.
- A child's ill-health has a direct impact on school attendance through prolonged periods of absence. In the case of a serious illness of someone living in a remote village, it is very likely that the family would need to migrate in the search for treatment. This, too, has a direct impact on schooling outcomes; it could also lead to benefit cancellation.

This chapter illustrates the many levels of deprivation the persistently poor live with, and hence the many reasons why they face long-term poverty, why it is likely that their poverty is inter-generational, why they are the hard-to-reach, and lastly, why general policy prescriptions are so difficult to implement in these locations.

7.4 Conclusion

This chapter also paints a picture of the context within which two of the main objectives of the BF should be effectively achieved. Those objectives are: (i) access to public services; and (ii) providing enabling conditions to overcome poverty, most importantly persistent poverty. The above analysis provides an understanding of why poverty in certain areas continues to be endemic and persistent.

It questions the extent to which the current structures of education and health services contribute to the reduction of persistent poverty, and whether it is appropriate to impose conditionalities upon the persistently poor. The structural conditions in which the BF operates in remote rural areas show how difficult it can be for beneficiaries to

cope with conditionalities. The analysis in this chapter also highlights the possibility that it is the poor quality of services offered in areas of persistent poverty that contribute to the vicious cycles of poverty, stigmatisation and unequal bargaining relationships. This analysis continues in the following chapter, based on households' accounts of the programme.

This chapter highlights difficulties inherent in another objective of the BF: the beneficiary's "graduation" from the programme by exiting poverty. The severe deprivation levels in which the persistently poor live show that the idea of the BF being a temporary relief is overly simplistic. There is no understanding of the myriad of the long-term interventions needed to support poverty-reduction initiatives.

Furthermore, the difficulties exiting poverty bring the discussion to another recurrent theme: dependency on the programme. The findings indicate that the claim that the BF reduces participation in work, resulting in dependency, disregards a number of vital facts: the lack of work in these regions; people's high levels of vulnerability and reluctance to engage in high-risk activities; and their labour-intensive unpaid household work in areas with reduced infrastructure.

The comparison between remote rural villages in PIR municipalities and non-remote rural villages in PNIR municipalities shows the limitations of the income-only approach to understanding poverty, and the problems of treating rural areas homogeneously. Although income and rural categorisation are important tools for analysing poverty and its distribution, policy prescriptions should not be based only on these approaches. The differences in location affecting the infrastructure of services and flows of people, information, resources and networks, mean that families have strikingly different prospects in life, even though they are equally classified as extreme poor.

Understanding the context in which the persistently poor live, complemented by the next chapter's analysis on how they engage with the BF implementation, is fundamental to investigating how effectively the BF reaches out to the persistently poor in rural Brazil.

8 "LIVING LIKE BIRDS": THE INFLUENCE OF REMOTENESS ON THE EFFECTIVE PARTICIPATION OF THE PERSISTENTLY POOR IN THE *BOLSA FAMÍLIA* PROGRAMME – THE HOUSEHOLD PERSPECTIVE

> *A father doesn't want a bad thing for their children [rural work]. Here, where we live, it is quite horrible during the rainy season, quite horrible, very hard work (...) There is suffering for those who are not pensioners, those who don't have a secured income, (...) they live in one place at one time, they live in another place at another time. Sometimes they work in one place, for a month or two, and then when service ends, they look for another type of work. Life is like that, we live like birds... (034nn BEN)*

8.1 Introduction

This chapter complements the previous chapters by providing an overview of the BF implementation from the point of view of households. The central question this chapter addresses is **RQ2c "How do poor rural households effectively take part in the BF programme in PIR and PNIR municipalities?"** To answer this question, I focus on two sub-questions:

(i) Sections 8.2 to 8.6 "How do the persistently poor living in the remote rural villages of PIR municipalities, participate in the BF programme?" and,

(ii) Section 8.7 "How do community-level mechanisms such as the ICS ensure that the persistently poor are given priority?"

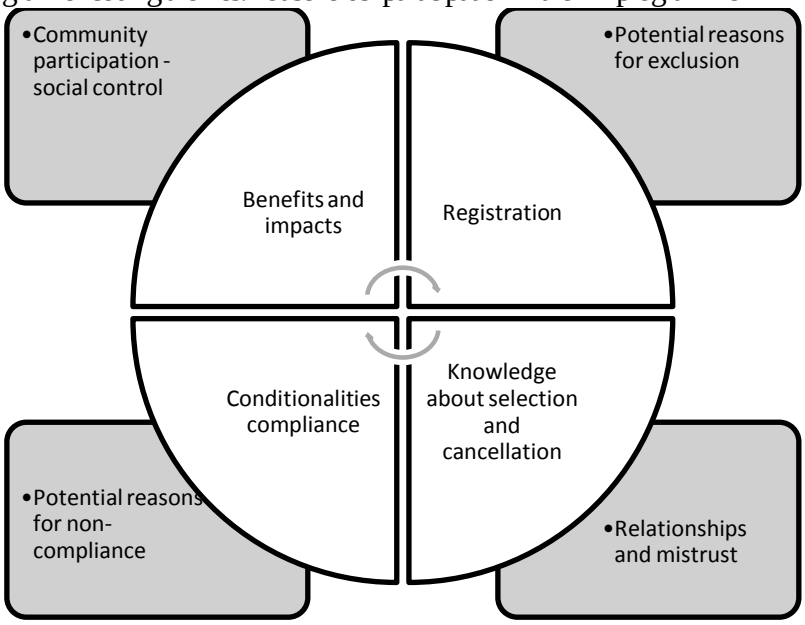
This chapter deals with the ways in which knowledge of the BF programme affects household participation in terms of registration, benefit allocation, compliance with conditionalities, and giving the persistently poor priority. Across all these themes, I explore the effects of inter- and intra-municipality remoteness on the lives of households through their personal accounts.

Official quantitative datasets are not helpful for uncovering the reasons for non-take-up, non-compliance and non-participation. Even finding the families is challenging, particularly those suffering persistent poverty and living in remote rural areas, with high migration patterns of those "living like birds". These are families who have not been entered into the system, or who have been entered but are later found to be missing.

Barrientos *et al.* (2005) make the case that social protection for the chronic poor needs to go beyond short-term risk management and a social safety net. This chapter presents a deeper understanding of structural processes that underlie chronic or persistent poverty, namely, discrimination, residual populations, marginalisation, exclusion, and a highly fragile existence. Social protection to address persistent poverty requires a long-term strategy.

The chapter is structured according to the themes illustrated in Figure 33 below. The themes in the circle represent aspects of programme implementation, and the themes outside the circle are aspects of social processes and structures referred to in the interviewees' accounts of their lives.

Figure 33: Diagram of coding themes: households' participation in the BF programme



Source: author.

Most of this chapter is based on household interviews, service profiling and protocol observations, and I compare accounts according to household selection criteria (i.e. BF participation, age, literacy and location, as per Chapter 3, Table 9, p.114). Section 8.2 addresses registration and possible reasons for exclusion from the BF. Section 8.3 deals with the interviewees' knowledge of the programme's selection and cancellation procedures, and their perceptions of political influence on the

programme. In sections 8.4 and 8.5 I use a mixed-methods approach to analyse compliance with education and health conditionalities in PIR and PNIR municipalities. Section 8.6 discusses the strategies used to collect benefits, as well as the impacts of the programme. Section 8.7 examines community participation, followed by the conclusion in section 8.8. This chapter has one appendix.

8.2 Registration strategies and reported reasons for exclusion

8.2.1 Registration strategies

The strategies mentioned by the local administration in Chapter 6 were confirmed by the households. Households learned about the BF through school teachers, health workers and CRAS staff, and also through radio, TV and cars driving around with loudspeakers. This analysis adds to this list informal "word of mouth" communication, the importance of which for the rural population is independent of age group or literacy level. As an interviewee put it:

> One person talks about it here, another one talks about it there. We listen to the radio that they are calling us to register. Then we go (016n BEN).

However, there are considerable differences between remote and non-remote rural villages, such as whether or not people are able to register promptly at the *Cadastro*, variations in the time it takes to register at CRAS and the costs of getting there, and the lesser working hours of the local administrations in PIR municipalities, as documented below.

Box 6: Comparison: households' registration strategies according to location

Report from a beneficiary who recently received the programme in an isolated rural village, PIR municipality (041i NBEN).	**Report from a beneficiary who recently received the programme in a non-isolated rural village, PNIR municipality (044n NBEN).**
I went there but when I arrived there they told me that the man that works with the system only works in the mornings and I went in the afternoon, right? So, they asked me to return in the morning … [but] it is hard to leave the village [to get to the town].	Every month I went to the town. Every month, I went there to know whether my benefit has arrived. So the local officer would update my registration form. Me: Couldn't you call the CRAS to know about your benefit? No, I had to go there every month.

As pointed out by the second interviewee in Box 6 above, there is a perceived need on the part of households to constantly make trips to the office seeking updates of their status. This poses an additional strain for the persistently poor living in rural remote villages.

In addition, it is important to emphasise that this perceived need for constant updates is a contradiction between policy design and policy implementation. Although the BF design requires an update only every two years, household perception is that increasing the possibility of receiving the benefit requires much more frequent visits. This belief on the part of households, that constant updates may speed up the process of receiving the benefit, is encouraged by the local administration staff. They have an incentive to increase the numbers of updated registration forms, since the municipality IGD financial transfer depends on it.

> So, every month, I went there to register. Whenever I had time to register, I did it … It is good to register, who knows the benefit will be released faster? So, I would always re-register my card. (039ii NBEN).

The lack of knowledge of how selection is made (see section 8.3), on the part of both households and local administrations, reinforces this emphasis on registration updates.

8.2.2 Reported reasons for exclusion: lack of documentation, limited quota, stigma, and Cadastro-related reasons

Lack of documentation

Surprisingly, lack of documentation, as indicated by local administration staff (Chapter 6, section 6.4.2), was only a superficial reason for programme exclusion. Underlying the lack of documentation were reasons related to age, transportation to institutions, and processing difficulties due to errors in the official documents presented at registration. These three findings are closely associated with the household sampling matrix of age, location and literacy, respectively.

When I analysed the interviews according to age, I observed that the rural poor tend to establish their households early in life. There were a considerable number of

under-aged women who had started families early in their lives. Teenage mothers are not able to obtain all the documentation for enrolling in the programme, and either they wait for their documentation, or they ask their husbands to enrol in the programme instead.

This finding points to two unintended consequences of programme implementation. The first of these is that teenage motherhood poses a particular challenge to the CCT objective of building up the human capital of the persistently poor by increasing school attendance. Several interviewees reported difficulties in reconciling education with child-rearing responsibilities, due to lack of formal (or even informal) child-care arrangements in rural areas. Furthermore, young mothers reported the role of mother conflicted with that of student. The social norm is that wives should not study because they have household responsibilities.

> There are times that the husband doesn't allow [his wife to continue her studies] (032i BEN).
>
> I don't have anything to say about my husband because lots of husbands after the wife has a child, they don't allow her to continue her studies (029i BEN).

This combination of these factors results in young mothers dropping out of school, reinforcing the combination of persistent poverty and low-education levels in rural areas. Poverty, as described, is not only a matter of low income but also of social structures, institutions and norms that are mutually reinforcing.

In the case of young mothers, the conditions under which they are raising their children prevent them from staying at school, and hence the conditionalities built into the programme are ineffective. This example highlights the difficulties of applying CCTs to the persistently poor. At the same time it brings to the fore the importance of changing the social norms, and the key role social-assistance intermediation and other supporting services (e.g. child care) play in programme implementation.

The second unintended consequence of the way the BF programme is implemented for young mothers is its failure to promote another policy goal, that of female empowerment. This was the intent behind the assigning of the cash transfer card to the female household head. Giving the male control over the benefit creates the possibility of an intra-household gender power imbalance.

In the case of documentation, analysing the dataset according to inter- and intra-municipality remoteness shows that the persistently poor in the PIR municipalities incur higher costs than the rural poor in PNIR municipalities in getting documentation. The main documents needed to register for the BF (mentioned in Chapter 6) are acquired at different ages, at different official institutions and in different municipalities.

Furthermore, some of the documents are free of charge, others aren't. For example, a birth certificate (*certidão de nascimento*), which is a copy of the birth registration (*registro civil de nascimento*) at the *cartório*, is free unless it is a reprint. To get a free reprint, individuals need to write a statement that must be signed by two witnesses and delivered to the *cartório* that issued the document. These two requirements, (i) written statements, and (ii) delivery to the same *cartório* that issued the document, are very difficult for the majority of the poor rural population, who are functionally illiterate and highly mobile.

The issue of documentation is complicated for rural households living in both PIR and PNIR municipalities. These complications demand immediate government action to simplify documentation practices in Brazil. The Government of Brazil did pass legislation in 1997 to unify the identification cards (*Law No. 9.454/1997*), but this law has not yet been implemented.

When I analysed the dataset according to education levels, the problem of incorrect information became even more obvious. Illiterate parents or those with little education have strong barriers to understanding the cumbersome processes of obtaining several documents. They cannot double-check the final document to ensure its accuracy. Some of them are unaware of their children's documentation problems until it is pointed out to them, and this results in psychological and material distress, as well as having implications beyond the BF registration process, as reported in Box 7.

Box 7: Illiteracy and incorrect documents, isolated rural village, PIR municipality

Report from a 51-year-old, mother of 11 children, whose husband is a rural pensioner, small farmer, illiterate, non-beneficiary, living in PIR rural village (043ii NBEN).

There is Danielle, who is currently unemployed because he is still fighting for his documents. There was a problem with his birth certificate. When he went to obtain his documents in municipality X [urban municipality 770 km away] and only when he arrived at the *cartório* there, they said that he should seek the *cartório* here [in another municipality nearby] to fix this error that was made in his name at the *cartório* here, so that he can get the documents. He is now … 19 years old. … My husband went to register his birth certificate and asked to put the name of 'Daniel' and they put his name as 'Danielle'. So, he is baptised with this name … when he went to school the boys called him 'little girl Danielle' so he got a bit rebellious and he complained to his dad that we didn't find out that his name had an error, that it is written as a girl's name. Because we don't have any study, we can't read, we never knew about this error, and it is with great difficulty … great anger that he continues living here.
Me: Did he stop studying because of that?
Yes, he did. The truth is the truth … he said 'Mum, I can't bear to be in the classroom with my name like this, I don't accept this … I am a man and this is an outrage'. … So, he went to get all the documents fixed at the *cartório* here and the *cartório* hasn't released them. … [The *cartório* informed us they have to go to the court and] the judge has to understand that we parents are not to blame … because we have no study, we can't read, really who is at the computer, being paid to work, he/she should have known better … in any case, my son is traumatised.

This mother reported her difficulty in finding out where to go, her reliance on the *cartório* staff for information about the next steps, her son's trips to several municipalities without any result, her uneasiness at being in front of the judge and the prolonged situation of embarrassment of her son and her family within the community. All of this information-seeking translates into an enormous cost of time, as well as the expense of transportation, lodging and loss of work opportunities. For the persistently poor – living in the remote rural villages of PIR municipalities – this represents a vast expense.

Limited quota

When I started the fieldwork, the government had recently increased the quota. The effect of this increase was clearly noticeable in the sampling: interviewees had either been receiving the benefit for a long time, or they had just received it. The high

proportion of beneficiaries who had all acquired new benefits around the same time also confirmed this hypothesis. As an interviewee put it:

> because before mothers would register and they would receive the benefit within four, five years of registering. Not nowadays, it is faster now, for example, you register here today and within a maximum six months it will arrive (029i BEN).

This reinforces the view that there are still families who are "eligible but not beneficiaries". Therefore, one of the potential reasons for the exclusion of beneficiaries is the sheer limitation in the total number of benefits available.

Stigma

Despite the growth of research in social psychology on stigma and how people construct stereotyped beliefs (Link & Phelan 2001), the stigma debate fell out of favour in the academic and professional circles of social policy. Nonetheless, with the rise of social assistance in developing countries, mainly in the forms of targeted CCTs, there is a need to bring the stigma debate back into the social policy agenda.

Although stigma is a complex phenomenon, it generally involves a distinctive attribute (a "mark" or a "label") defined in terms of undesirable characteristics ("negative stereotyping"), which results in a discriminatory separation between "us" versus "them" (Link & Phelan 2001; Smith 2002; Titmuss 1974). CCTs are prone to stigmatisation. The poor are the recipients of "our" help, but they need it because they did not make the best decisions to overcome poverty.

The potential for stigmatisation in CCTs has already been raised in Chapter 7, when the poor are those who cannot be trusted: they are 'adverse possessors'(sub-section 7.2.1), 'bad' risks (sub-section 7.3.4) and 'dependents' on the 'alms grant' (sub-sections 7.2.1 and 7.2.2). Box 8, below, shows stigma as a potential reason for non-enrolment, according to the beneficiary's own words.

Box 8: Stigma in the registration process

Report from a 46-year-old, mother of two children (not living with her), completed primary education (year 8), husband who has just been put in jail, which obliged her to migrate back to the village where she grew up. She is chronically ill, a non-beneficiary, living on the charity of family and friends, PNIR rural village (046nn NBEN).

Me: Have you thought about registering for the Bolsa Família?
She [health rural community agent] has talked to me about it …
Me: Do you have all the documents?
Yes, I do.
Me: Do you know where to go?
Yes, she told me where to go.
Me: Why haven't you registered for the Bolsa Família already?
It is because we go through all the trouble of photocopying the documents, going there for it not to be approved. So, it is better to stay like I am now. I have even thought that lots of people register and they are not selected, there are others that register and they have the luck to be selected. I don't know if it is luck of what else … I say I won't leave my house to go after it. I won't, if it is so difficult. I am not patient enough to be waiting there … there are some people that attend us well; others don't. So, for me to be called up names … it is better I stay at home … because, you know, there are lots of places that attend us well, right? Well, because that person who needs something like an income, like from the government, that person thinks that we are people that are of a low level, just because that person receives a wage or the sorts, they think they are everything and above everyone, right? So, for me, this is not how things are solved, but there are lots of people that think like that.

This woman, who told me that she suffers from discrimination because her husband is in jail, shows that her reluctance to deal with the application process and enrol is due to her uneasiness at the type of treatment that she might be subjected to. The benefit is not an entitlement and the poor do not know how selection happens (further details in section 8.3). This results in an unequal power relationship between the potential beneficiary and the local administration, and a hidden social expectation that the poor should not be "trouble makers" and should behave in a compliant way.

Cadastro-related reasons

The household interviews confirmed previous findings that there are ways in which the *Cadastro* system itself is responsible for excluding households (Chapter 6, section

6.4.2). They uncovered two *Cadastro* functions that could result in the exclusion of households: the updating requirement, and problems with the household concept.

Registration updates must be conducted, either when the income circumstances or family composition change, or every two years. I have already demonstrated that intra-municipality remoteness has a negative impact on registration and the frequency of updates. The persistently poor, who face higher costs to update due to location, may have their benefits cancelled when they fail to update their information.

In the case of the household concept, MDS (2013) defines "family" in terms of "household", which is defined in the BF legislation as a "nuclear unit comprising one or more people, eventually including others who contribute to or have their expenses covered by them, all dwelling under the same roof" (*Portaria No. 177, de 16/06/2011*, art. 2*)*. The concept of household poses several problems:

- Beneficiaries reported getting confused by the name of the programme, i.e. *Family* Grant (BF),not knowing that 'family' applies to any household. This has meant that eligible potential beneficiaries do not register because they do not have a family, i.e. they do not have children.
- Defining a household in terms of "dwelling under the same roof" causes problems, particularly for the persistently poor living in PIR municipalities who frequently out-migrate ("living like birds"). In contrast to the rural poor in PNIR municipalities who generally migrate to a nearby urban municipality, the persistently poor of PIR municipalities cannot easily return to their home town. This temporary migration can mean that they register again in another municipality. If the local administration does not transfer the *Cadastro* registration carefully, this could result in the duplication of entries and the cancellation of the benefit.
- Constant household changes and, most importantly, the movement of children in and out of different households, affect how family members are registered and how benefit is allocated within a household. From my interviews I observed that there were variations in household composition: households headed by both parents; by single parents; by foster/adopted parents; and by the grandparents with or without the parents living there. Children moved

from household to household, and the benefits associated with that particular child could become a source of controversy.

- The nuclear concept of household treats every household member the same, even though different age groups have different needs. People are particularly vulnerable at certain ages, such as single mothers below 25 years of age, especially if under-age, and those above 40 years but below retirement age. The latter group would most likely receive only the basic benefit and no benefit associated with children, as their children would generally be above school-age. However, although the children are probably adults, it is unlikely that they are independent of their parents, especially those who were reported to suffer illness and joblessness.

Although concepts like "household" may be necessary to operationalise the BF programme for targeting and means testing purposes, the findings show how complex human social relationships are. Tying the members of a household down to a single place of residence, and homogenising the household needs of different life stages and different household compositions, means that policy implementation will be inadequate in certain respects, potentially excluding eligible beneficiaries. The report below illustrates how the persistently poor try to solve *Cadastro* problems in the face of household changes, migration, inter- and intra-municipality remoteness, illiteracy and lack of trust.

Box 9: Solving *Cadastro* problems in isolated rural villages, PIR municipality

Report from 51-year-old, mother of 11 children (four of school age), husband is rural pensioner, small farmer, illiterate, non-beneficiary, living in PIR rural village (043ii NBEN).

I didn't understand what a single registry (*Cadastro*) means; do you understand what I am saying? … [So,] I asked her [local administration] to look at the card and she said 'look here, your card, look, there is a problem with your card. It shows that you have a registration, you registered here and you registered at municipality A [770 km away]. It shows you changed municipality.' … I said, 'no, I didn't change this registration … it was my daughter's school benefit' [the daughter is living in municipality A with a relative]. So, I am going there [municipality A], since 2007, I went 4 times there to see if I could get it back … I said [to the local staff at municipality A] 'for the love of God, I ask you, please request the transference of my *cadastro* registration to here because I was not to blame, I didn't know, I didn't understand … because really I can't read, I don't understand written things, if they messed it up, there is nothing I can do about it, because first they told me that there wouldn't be any problems for me and now I have this big problem' … I came back with hope because **what else to do if you live in a place like this?** Only one pensioner at home with so many children, with so many sons needing clothing, shoes, knowledge, to go to school and you without having the conditions to provide? … So with hope, listen well, 1 year has passed, 2 years, 3 years … and nothing of my *Bolsa família*, nothing, nothing, nothing … [two months ago] my daughter went to register her family [there at municipality A] … She called me and said 'Mummy … you are being deceived … your registration was never transferred from here, it is here' … so I said 'I will go there'. I travelled to municipality A again … So, [back] here, I had to include [my sons/daughters] but given that the person [local staff] had fooled me for all of those years, I no longer trust her.

8.3 The information problem: selection, cancellation, complexity and mistrust

8.3.1 Reported reasons: BF selection and cancellation

Some interviewees reported not knowing the reasons why they had not been selected. Others said that they had not received their benefit yet because, according to the local administrator, "they were waiting for a place to become vacant" (044n NBEN). Others said that their names "are in the queue, there are lots of people in line, one must be patient" (031nn BEN). As stated in Chapter 5, however, even if a place in a given municipality becomes vacant, it does not automatically mean that the benefit will go to that same municipality. Furthermore, there is no order, no waiting list for benefit allocation.

Some of the reported reasons for selection related to registration practices, as explained in the previous section. For example, some interviewees believed that the more current their registry was the quicker they would receive the benefit. Others seemed to think that they would only register when there was a local call for registration, or even that they should never update the registration – in these cases, after two years, the registration is dropped out of the system. So, although the family may still be waiting for selection, it may no longer be counted as a potential beneficiary.

> It has been three to four years [since I registered].
> Me: And you never got it. Do you know why?
> No, I don't.
> Me: Do you know if you need to go there again [to register]?
> We [only] know when they announce it on the radio, right? They haven't put anything so I haven't gone there since then (040n NBEN).

> So, she [the local *Cadastro* technician] said 'look, your *Cadastro* wasn't for you to touch it, never, because, really, this is a single registry for your whole life, only after your death would someone take it over' (043ii NBEN – *household head account of why her benefit was transferred to another municipality, resulting in duplication of her Cadastro entry*).

As reported in Chapter 6, the selection process is also a black-box for the local administration, whose participation is limited to ensuring the registry is updated. Updating the registry is only necessary if the family changes their financial situation, if the household composition changes, or if the *Cadastro* form is older than two years. However, household changes occur frequently in the lives of these families, and the persistently poor have great difficulty coping with the costs of constantly updating their *Cadastro*.

Some interviewees said that the reasons for benefit suspension or cancellation was related to children's attendance at school, but no one mentioned lack of compliance with health conditionalities as a reason for cancellation. Hardly anyone mentioned receiving written warnings of possible benefit suspension; this is not surprising given the literacy levels of the target population.

When I analysed the dataset by literacy levels, I could observe how important literacy is in dealing with BF bureaucracy. Households with higher levels of literacy are better equipped to search for information beyond that obtained from local

administration staff, through the internet or pamphlets and other written sources. They are able to cross-check and examine references.

On the other hand, household heads with little or no literacy rely on others for understanding how to navigate the *Cadastro*.

> He [local administration staff] swiped [the BF card], typed typed typed turned the computer around and said 'do you see this?' I said 'I do' then he said 'It is not blocked'. I don't know [what I saw on the computer screen] I don't know how to read, I don't know anything (laughs) (045i NBEN).

Such households have to trust the local administrator to navigate the *Cadastro* system on their behalf, they cannot double-check it, and they do not fully understand the complexities of the programme. Therefore, although the potential beneficiary may have been given an opportunity to receive the BF benefit, their lack of education prevents them from fully exercising this opportunity, trusting instead in the power relationships and on their understanding of "what the other person said". When communication is not perfect, mistrust levels increase, as shown in Box 9 and in the following sub-section.

8.3.2 Complexity of the programme and mistrust in relationships

Relationships between local administrations and households can be difficult at times, as reported by both local administrations (in Chapter 6) and households.

Households struggle to find out why their benefit has been cancelled, hampered by the structural limitations on their ability to acquire knowledge. The complexity of the programme, with different parties involved in different aspects of programme implementation, exacerbates the cycle of mistrust, as reported below:

> I said 'do you see this paper here? I got it now from the internet at the Rural Worker's Union and at the banking correspondent, do you see it? How can you tell me that the internet is down?' Another woman that was waiting in line said 'yes … they are fooling us' (045i NBEN).

Households are also caught in a mismatch of the information from federal staff with that provided by the local administration staff. Interviewees reported calling the federal 0800 line in Brasília and being told by federal administration staff that the

"problem was at the local town hall". However, when they went to the local town hall they were told that "the error is in Brasília".

> So, we stayed always like this, we called one place they blamed the other (039ii NBEN).

Searching for information to resolve pressing cancellation issues is another cost for persistently poor households. The more remote a village is, and the less their access to the internet or other means of communication, the higher the cost of reaching a local administration or the nearest urban municipality to solve issues concerning the BF card, especially as it usually requires several trips.

Box 10 illustrates the difficulties for the persistently poor in their search for information, and how low levels of literacy affect their ability to double-check information and to fully understand programme implementation. This results in mistrust towards the local administration staff.

Box 10: Mistrust and remoteness

Report from 63-year-old man, fisherman, wife is 49 years old, mother of 10 children (only one living with her, others live with the dad), less than 4 years of study, recently got their BF benefit back, living in an isolated rural village (045i NBEN).

[husband] She spent 8 months without receiving it, right. Then she spoke out there and she got her benefit in one month or two for later to be cut again. Then she went after it … and they started to fool her, right? Fooling her, fooling her … then she said 'I will break my card'
Me: Did you say that?
[wife] I was spending too much [on transport] without having it, there was time that I owed 3, 4, 5 [bus] tickets.
[husband] So I left the village here and said 'give me your card'. I went to the town hall … [said to the local administration staff that my wife] goes to municipality A [urban municipality 126 km away], and there they say 'no! Your card is not blocked. The problem is in your municipality, the town hall there'. I come here and you say that the problem is there, at municipality A. 'What is this? Do you think you can fool me? I am not learned, I do not have any study, but I am sixty and something years old and it is not possible to be such an idiot. I am a fool because I can't read but I am not an idiot. … Somebody is eating my benefit here, chap!' … the woman goes there, swipe the card and nothing. Where is the money? She goes to municipality A the money is in the account, when she arrives here you don't release it.

8.4 Compliance with conditionalities: the quantitative analysis

Conditionalities are a central part of the BF programme. Therefore, it is important to understand how poor rural households comply with conditionalities, and whether remoteness imposes a constraint on households' effective participation in the programme.

In this section, I report the descriptive statistics on compliance with health conditionalities, and the reported reasons for non-compliance with education conditionalities. In section 8.5, I explore the qualitative findings on possible reasons for non-compliance with conditionalities.

8.4.1 Health conditionalities

Health conditionalities are monitored twice a year. This mostly involves following up on pre-natal and post-natal care, and the children's immunisation schedule and their growth and development up to seven years of age (*Lei No. 10.836, 9/01/2004*, art 3o).

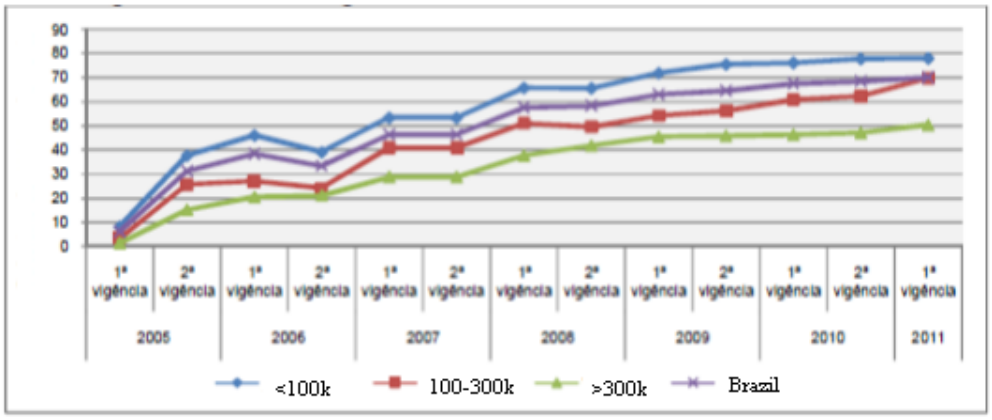
The Ministry of Health has improved the coverage of preventive health care services, like the Community Health Programme (PACS[107]) and the Family Health Programme (PSF[108]). These programmes take part in the BF health monitoring aspect. In 2008, 96.2% of municipalities had PACS, and 94.1% had PSF. However, the percentage of the population within each municipality covered by PACS and PSF is still limited, comprising 60.4% and 49.5% of population monitored, respectively (MS 2008).

In the municipalities I visited, community health workers from PACS reported compliance with conditionalities to the PSF Centres, who then reported to the municipal Secretariat of Health. A technician would then enter the information into the Ministry of Health database.

[107] *Programa de Agentes Comunitários da Saúde*
[108] *Programa Saúde da Família*, later called ESF – *Estratégia de Saúde da Família*

Overall, the Ministry of Health data indicated that BF families living in smaller municipalities (up to 100,000 inhabitants) had levels of monitoring from 2005 to 2011 that were above the national average (MS 2011). Figure 34 illustrates this.

Figure 34: Percentage of households monitored by the Ministry of Health by municipality size, 2005-2011



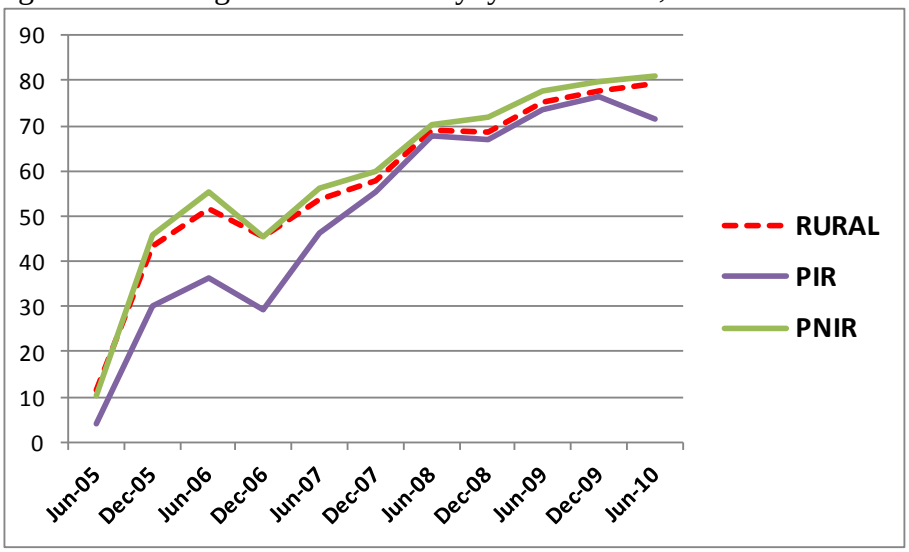
Source: adapted from MS (2011).

Although the figure does not indicate whether these small municipalities were rural, urban, isolated or non-isolated, it does suggest that smaller municipalities can monitor beneficiaries more easily. However, there may be factors other than the small size of the municipality behind the differences in monitoring levels shown in Figure 34. First, health monitoring is also closely associated with coverage of PACS and PSF services. The above data may be capturing the effect of the coverage of these two programmes on the monitoring of families' health. Thus, it is possible that higher levels of monitoring are not related to the small size of municipalities, but rather, to higher coverage of PACs and PSFs. According to MS calculations, municipalities with low PACs and PSFs coverage (<10%) were able to monitor only 59.0% of the BF families, while those with high coverage (>90%) monitored 80.3% (MS 2011 p.8).

Second, Figure 34 does not include information on the location of the remaining 29.1% of BF families who were not captured in the monitoring system, totalling 3,051,665 million families in 2011 (MS 2011 p.10). There were attempts to visit 15.5% (472,408) of these families *in loco*, but 92.5% were not located for the following reasons: the family had moved out (68.2%), the address was non-existent (1.2%), and other reasons (30.6%) (p.11).

The data I obtained from the Ministry of Health show the percentage of BF households monitored (Figure 35). Technically, there is a difference between households monitored and those compliant with conditionalities. However, I use the terms interchangeably because almost all households monitored are compliant. The Ministry of Health reported that compliance with conditionalities among the households monitored between the second half of 2005 and 2008 varied between 95.3% and 99.6% (MS 2009). Figure 35 shows the average compliance with health conditionalities by PIR and PNIR municipalities, and compare them with rural municipalities.

Figure 35: Monitoring of health conditionality by PIR and PNIR, 2005-2010



Source: author using MoPI, BCIM, *Datasus/Sisvan* (2005-2010).

Figure 35 shows an improvement in compliance across the years. Although PIR municipalities are consistently below PNIR municipalities and the rural averages, the difference diminished from 2007 to 2009. It is important to clarify the reasons why there is lower compliance with health conditionalities in PIR municipalities. This is carried out with the qualitative analysis in section 8.4.

The Ministry of Health (2009) identified some of the difficulties faced by the municipalities in improving the coverage and compliance levels. Among the main difficulties were: time spent in system updates, lack of integration between different sectors and lack of knowledge of what the health conditionalities were. In 2011, an analysis conducted by the Ministry of Health in municipalities with low levels of compliance showed that lesser compliance related to logistic problems like

insufficient typists and reduced internet connection, as well as to the high mobility of the monitored population (MS 2011). Some of these reasons were also identified by this thesis.

However, compliance with health conditionalities does not necessarily mean improved access to health services. For example, the household may have to travel long distances (intra-municipality remoteness) every six months to comply with health conditionalities. Mothers may still have problems finding specialised health care for premature babies (inter-municipality remoteness), such reported on Chapter 7, section 7.3.6.

Furthermore, good compliance does not necessarily mean improvements in the families' health status. Although complying with the children's immunisation schedule is a significant achievement, good health involves wider issues than those specified in the conditionalities. Monitoring children's growth and development, for example, requires additional nutritional interventions and continuity of care if children are undernourished. Two data points a year do not capture this.

Inter- and intra-municipality remoteness has an impact on local service infrastructure (e.g. sanitation and provision of water, as described in Chapter 7), and this poses an additional strain on the health services. Children still suffer from preventable diseases because of the lack of infrastructure such as sanitation and drinkable water. The qualitative analysis will address how households get access to health services, and how they perceive the quality of services provided.

8.4.2 Education conditionalities

Education conditionalities involve children's school attendance. Basic education in public schools in Brazil is free. Children (6-15 years old) must have a minimum of 85% of attendance and teenagers (16-17 years old) a minimum of 75% (*Lei No. 10.836, 9/01/2004,* art 3). School attendance is reported every two months to the municipal Secretariat of Education, who then informs the Ministry of Education.

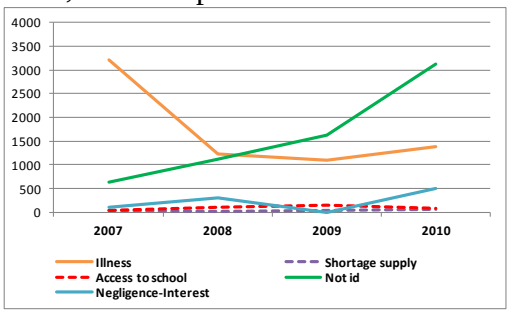
The Ministry of Education dataset registers reasons for low school attendance. Whenever students miss classes, teachers must be informed of the reason. It is important to mention that I used data only for the younger children, excluding all

information on the older teenagers. Rural education is still mostly concentrated in the initial four years of schooling. Moreover, reduced school attendance of teenagers may relate to different types of service than the usual schools, such as night classes. The lack of classes at night does not necessarily mean that there is a lack of schooling.

For programme implementation purposes, reasons for absence from school are classified into two different groups: those that are counted as non-compliance and those that aren't. Only reasons that result from family actions, such as lack of interest, negligence or work, are counted as non-compliance. These factors flag families that require immediate follow-up. Reasons that are beyond the family's control, such as illness, death and lack of services or transportation, do not count as non-compliance (MDS 2010a).

Figure 36 and Figure 37 show the absolute numbers of the main reported reasons: illness; negligence/lack of interest; shortage in supply of school services; factors that impede access to school; and "non-identified" reasons. There are other reasons registered with the Ministry but not illustrated below, namely, suspension, pregnancy, homelessness, child labour, illness/death in family, violence, and "other". For a list of all declared reasons and their definitions, see the appendix to this chapter.

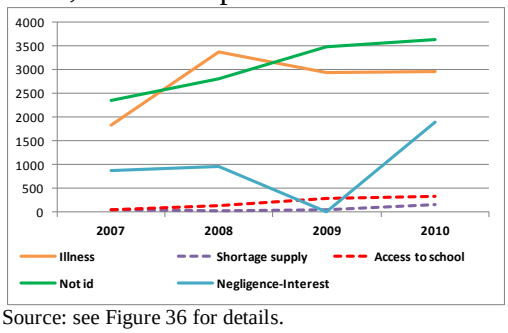
Figure 36: Declared reasons for absence from school, PIR municipalities



Source: author's calculations using MoPI, BCIM, *Presença* (2007-2010).

* Shortage in supply of school services includes disability services in 2009-2010.

Figure 37: Declared reasons for absence from school, PNIR municipalities



Source: see Figure 36 for details.

* Shortage in supply of school services includes disability services in 2009-2010.

I would like to add some caveats to these figures. Given that they are based on an administrative database, the definitions of the reasons may not be the most appropriate for the purposes of this research. For example, MEC defines "factors that impede access to school" as follows:

> there are situations that impede student or various students from getting to school, such as floods, natural disasters, lack of transport, difficult transportation due to quality of roads (mud holes), urban violence and other calamities (MEC [n.d.]-a p.29).[109]

This definition is very broad and lack of transport is only one of the reasons but it gives us an overall idea of the difficulties in reaching school, some of them sporadic (violence, natural disasters), others more long-lasting (lack of transport, bad roads).

Figure 36 and Figure 37 show that student illness is one important reason for not attending school, although it has slightly reduced in importance over time. However, negligence and lack of interest, two behavioural reasons, are a growing trend. Quite surprisingly, though, there are a large number of reasons that are "not identified". This could jeopardise the proposal that reasons for non-attendance be used to flag family needs for complementary interventions.

Shortage of supply of school services (the purple dotted line) and access to services (red dotted line) do not seem to be a matter of concern, taking only the information contained in the Ministry's database. However, the dataset manual says that, for situations affecting more than one student[110], such as the non-appearance of teachers/staff, problems with transport, or the non-provision of services, all students should be registered as attending school. This requirement throws doubt on the quality of the data being registered, as well as on the possibility of using the information on the supply of services as a mechanism to improve public services.

Moreover, as in the case of health conditionalities, simply registering compliance does not capture the costs to households of getting access to services, e.g. lengthy times time spent on school buses due to road conditions. Again as in the case of health conditionalities, compliance does not mean services of better quality. The following reasons for non-compliance with conditionalities – remoteness,

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[109] MEC ([n.d.]-a p.28) defines the shortage of school services as follows: "this situation covers the possibility of the non-existence, in several municipalities, of primary and secondary schooling in the community, mainly in rural areas. It also encompasses the possibility of lack of educational services for resettled communities. Another situation which encompasses this item is the lack of schooling services for youth offenders. Lastly, there is the lack of Youth and Adult Education (EJA)".

[110] If these reasons affect the overall functioning of the school, the local authority must inform the Ministry of Education. The manual (MEC [n.d.]-b p.30)states that all students should be registered as attending if more than 50% of the month's attendance was compromised.

"negligence/lack of interest" (behavioural) reasons and those unaccounted for, and service quality – will be discussed in the next section.

8.5 Possible reasons for non-compliance with conditionalities: a qualitative investigation

I divide this section in the following way: first, I address whether households know about the conditionalities; then I attempt to identify the non-identified reasons for low school attendance; and lastly, I investigate interviewees' perceptions of the quality of services provided.

8.5.1 Lack of information on conditionalities

Households may fail to comply because they lack knowledge of the conditionality requirement. There is mixed evidence on just how much beneficiaries know. In a longitudinal evaluation study, De Brauw *et al.* (2011) found that while more than 90% of respondents could correctly identify education and health conditionalities, a closer inspection revealed that 41% believed that the BF had no education conditionalities, and 43% believed that it had no health conditionalities (pp.84,86).

My fieldwork mirrors this finding – people understand that they must send their children to school in order to receive the BF, but what the conditionality entails exactly is not clear to beneficiaries. Some people think that the children must have good grades to receive the benefit.

> No, they do not lose it [the benefit], but some of them have their benefit reduced. The government has the possibility of reducing it. They do not cut it totally; they only scare recipients a little bit so that next year they will pay more attention (029i BEN).

There was no indication that parents knew how many times their children could miss a class before the benefit was cut. They only said that children must always go to school. This finding suggests households' perceptions conflict with the programme design. For the government, benefit cancellation is intended to have a "soft" or gradual effect on households, convincing them to comply but not penalising them. However, households believe the opposite. They believe that not attending school will have an immediate impact on their benefit, unless absence is justified. Their lack

of knowledge about how many times a child can miss school before a benefit is cancelled means that they feel obliged to make the children always attend school. The government discourse is not about penalising households, but beneficiaries' perceptions differ substantially. They are afraid of losing the benefit, a highly valuable benefit for the persistently poor.

This feeling is capitalised by local administrations. I triangulated reports from beneficiaries with those from local administration staff on the use of the benefit as a way of attracting households to school meetings or social assistance centres.

Parents know more about school conditionalities than health conditionalities. There are several possible reasons for this. One of the BF conditionalities is attendance at school meetings. As well, school conditionalities have a wider coverage than health conditionalities. They include children from the age of six to the age of 17, while health conditionalities only include pregnant women and children up to the age of seven. And finally, BF health conditionalities are often confused with another benefit called "maternity benefit". Thus, if parents do not associate the receipt of the BF benefit with the fulfilment of health conditions, this may result in one of the reasons for reduced health attendance.

8.5.2 Uncovering the importance of education for households

Figure 36 and Figure 37 show that among the most declared reasons for absence from school are illness, "non-identified", "negligence", and "lack of interest". In this subsection, I report the findings on how important the rural poor perceive education to be.

I used several questions at different points in the interview to probe for people's perceptions of the importance of education[111]. Asking parents for an account of their life-history included their level of education. I asked about the reasons they stopped studying. I further asked whether their experiences of reduced literacy had affected their lives, and if so, how. Then, I analysed their responses to a hypothetical scenario, in which their teenage daughter or son wants to stop studying to contribute towards the household income.

[111] Due to time constraints, I was not able to analyse the perceived importance of health.

This analysis is limited to the parents' views on the use of education and health services and to their parenting experiences, not the children's. It shows whether there are still any reasons for restricting their service take-up, and it provides insights informing the quantitative findings of the declared reasons for low school attendance. I divide the reasons for non-compliance into four categories: (i) financial reasons; (ii) labour markets; (iii) social reasons; and (iv) health and learning difficulties.

Financial reasons

The financial importance of this programme for households that rely on agriculture is undeniable. There is overwhelming evidence from the families themselves of the financial importance of the BF. The difference the programme makes for the persistently poor means the possibility of fulfilling basic needs of food security.

> Before [the BF] it was like … I am not going to say that we were starving, no, but it was sort of like that (028n BEN).

The importance of this social assistance benefit cannot be underestimated. Parents reported that they dropped out of school because of dire poverty.

> My dad didn't have the means to afford me in school or in anywhere else, so … [I started working] (027nn BEN – *This single father was 11 years old when he started working as a lumberjack*).

> It was because, I had no childhood, do you understand? I had to go a neighbour and wash the dishes for eating, sweep the floor for eating (031nn BEN).

Although the benefit gives some sense of security in the lives of children, there were some families who reported that the benefit was too little to meet their needs. Single mothers and large families living in isolated rural villages had greater difficulty coping with the conditionality requirements. Conditionalities oblige families to negotiate their children's attendance with school principals so that their children can skip classes while the family undertake seasonal work in another municipality. In that way, families are able to meet their income needs without losing the benefit. This type of bargaining is again to the disadvantage of the worst off.

> I continue to work, sometimes I ask the teachers, I say 'well, you will have to allow me because you don't give me what to eat and this card doesn't support five children, it doesn't. Sometimes, they complain, sometime they give 2-3 days [off school]. This week I went there [another municipality] and I spend

> 4 days working, harvesting beans. So, I brought some beans [home] (039ii NBEN).

The impact of the benefit in terms of food security is discussed in section 8.6.

Labour markets in rural areas

In Chapter 7, sub-section 7.2.2, I presented the effects of inter-municipality remoteness on labour markets and flows of people, comparing PIR and PNIR infrastructures. In this sub-section, I present the parents' perceptions of how education affects their children's entrance into the labour market in rural areas.

Parents recognise the importance education would have had in their lives. They believed that, if they had studied, they would have had better employment opportunities, including stable jobs, either in the local town or in another municipality. There is a common belief that the children would be able to have a different life than the one they have now if they study. The children would be able not to rely on agriculture.

> Those who study have a good job, they have more chances in life. Now, those who don't study don't have much of a chance. Don't you see her case, she knows nothing. So, she has no chance of finding a job, our children, we try our hardest for them to study, so that in the future, s/he would have a good job, a job that would earn a living wage, we put our children in school for this reason. We wish them to have things or to be someone in life. This is her wish and mine too (044n NBEN).

Parents reported their disillusionment about agricultural jobs, their discontent with rural work, and the harsh conditions of work, which they felt offered little reward and little pay. These working conditions had a negative impact on their self-esteem, and they wanted their children to have a different fate from theirs, to "be someone in life". They did not want their children to work in rural areas. But for that to happen, their children needed to improve their level of education.

> Not working on the farm, because this is not a good job. That they study more and go on to do something like IT, something more different. Old farm jobs are not a line of work. By itself it is not enough. Not by a long shot … Like my husband, if you see what I mean. How can he provide for me? There is no money, not even to buy some clothes (039ii NBEN).

When I outlined to parents the scenario of their children dropping out of school to help them financially, all the parents emphasised the importance of studying. At

worst, they offered a compromise of allowing work if the teenager would study at night.

However, some households recognised the limitations of the local job market and the inadequacy of the rural education curriculum. Studying "too much" may not result in getting a job locally. They considered the costs and benefits of studying. As one interviewee said:

> too much study is not worth much either. When you find a job, it is not that good, you can't find a job in the area [of study] (042nn BEN).

This shows the complexity of calculating the returns to education in a highly insecure future, facing present food insecurity. On the one hand, parents recognise that education is vital for increasing their children's chances of getting a well-paid job; on the other hand, inter-municipality remoteness influences the local job market and creates a disincentive to study, reinforcing the cycle of persistent poverty in PIR municipalities. As interviewee said "why study if you will end up holding a hoe handle?"[112] The situation is different for PNIR municipalities with opportunities for non-farm employment for the rural youth. The local labour market, therefore, is taken into consideration by households when they assess the importance of education.

Social reasons

Parents' reasons for dropping-out of education early are still valid today. These include early household formation, type of household composition, and migration; these social events influence the possibility of schooling.

The case studies showed a repeating pattern of early family formation: women's underage marriage, followed by dropping out of school and child-rearing responsibilities. Young men also dropped out early to support the family when they married early.

Another important life event associated with the interruption of schooling is the continuous change in household composition. I heard reports of parents who were abandoned while they were growing up, or whose parents died early, of children living with grandparents due to parent's migration for work, of children growing up

[112] Statement captured during a protocol observation.

in households not headed by their own biological parents, *etc*. Household dynamics have an impact on children's ability to attend school and their emotional disposition towards learning. As one interviewee reported:

> I was very little when my mother abandoned me, so I was under my father's responsibility that left me with my step-mother. Step-mothers are never like mothers. So, I had to take care of myself (031nn BEN).

Schooling in PIR municipalities is particularly badly affected due to parents being located in different municipalities. Therefore, changes in household composition and migration could result in lower school attendance because of the impacts they have on the children's lives.

Although parents perceive education as important, they report being confronted with filial disobedience. Parents say that, at a certain age, they can only advise their children. This response may reinforce the hypothesis that older children/teenagers lose their interest in studying, as reported in "lack of interest" in section 8.4.

This is a plausible hypothesis considering several factors, previously noted: the inadequacy of the school curriculum in rural regions; under-qualified teachers; lack of teaching materials; poor school infrastructure; limited opportunities to continue to tertiary education; and the local job market (among others). Thus, the reporting of "lack of interest" should be understood in a broader educational context, which also includes supply-side deficiencies.

Learning difficulties and health problems

Some parents reported learning difficulties as the reason they dropped out.

> I didn't study because I didn't want it … I was never able to learn. I don't know, there must be something inside my head that I can't do it [can't learn] (044nn NBEN).

Parents reported their children's long-term health issues as reasons for not going to school, such as lack of ophthalmologists or lack of money to purchase glasses. I can also speculate other possible situations, such as the lack of ear-nose-and-throat and speech specialists, and the occurrence of attention deficit or hyperactivity disorders, or even of cognitive impairment related to malnutrition.

> Me: So, why did your 13-year-old son take longer to start school?
> because … he has a sight problem. They [the school] asked me to wait a bit longer to see if after he grew up if there was still a problem. But he still cries a little when he studies … his eyes hurt.
> Me: Have you taken him to the local town?
> No, he never had an eye test (032i BEN).

This particular rural village was a long way away from the local town. Even if the mother had taken the child to the ophthalmologist, she would have not been able to purchase glasses. Although the government has a free glasses programme, I also heard several complaints of this programme not reaching these municipalities.

8.5.3 Investigating the quality of services

People's perceptions about the quality of the services may influence conditionality compliance. It has been reported that, although conditionalities link households' behaviour to the quality of the services offered, there is little or no policy feedback about improving public service provision.

Overall, the households reported unfavourably on the quality of the health services. Even when local services were staffed, households still preferred to go to the town hall or the nearest urban municipality. For specialised services, households went even further, to the nearest regional urban municipality, because there were no services nearby. Again, it can be seen that inter- and intra-municipality remoteness impinges on the mobility and health outcomes of the persistently poor.

As for school services, there are two worrying findings. First, there is the recurrent complaint about lack of school meals. When access to free school meals is sporadic, there is an additional constraint on the household budget, resulting in food insecurity, hunger and household distress. As one interviewee said:

> It is not just sometimes but often that there is no school lunch … They come home and say 'mum, there is no school meal', sometimes they say 'mum, make popcorn for us to take to school', 'Mum, give me some money to take to school'. So, sometimes I curse. I don't even have the means to give them some money to take to school … Look, we can't do it, we can't make their breakfast for them to eat early and give them their school lunch for them to take to school! (039ii NBEN).

The second worrying finding is that the some of the children are exposed to environments that are not safe or protective. There were reports of mistreatment of students by school authorities, such as physical punishment and verbal abuse.

> sometimes I receive a complaint and I go there [to the school]. They say 'I will smack them'. I say 'you don't need to spank them, just ground them' (032i BEN).

These findings are of great concern. Conditionalities pressure parents to send their children to an environment that is not conducive to learning because the children are hungry and because there is a possibility of abusive interactions. Furthermore, evidence from the interviews shows that parents will most likely not denounce the teacher or the school to the authorities, as this may result in straining their relationships, weakening their network of survival.

In an environment without free school meals, intra-municipality remoteness makes it worse for the persistently poor. There are fewer opportunities to change schools or teachers, as there is only one schooling option in a remote village. If the children are older and go to school at the local town, they spend more time travelling without having eaten.

In sum:

For the households interviewed, school and health services are perceived as important. They want their children to "be someone in life" and for that they need education. They understand the importance of vaccination. Local officials enforce school attendance, and several health programmes require children's immunisations. Thus, there is no evidence that households would choose not to claim the benefit because they wanted to avoid fulfilling the conditionalities.

This is also demonstrated by the quantitative data. Cancellations due to non-compliance were only 4.5% on average between 2006 and 2008 (Soares 2012a p.11). So, what are the reasons behind non-compliance with conditionalities? Why would families risk losing the benefit? Some of the findings from the qualitative investigation are summarised in Table 14 below.

Table 14: Possible reasons for non-compliance with conditionalities

Possible reasons that households do NOT comply with conditionalities	Does it lead to benefit cancellation?
Lack of information on health conditionality.	Yes, if not compliant.
Early household formation[(1)]: * young women with child rearing responsibilities; * young men with a family to support.	Yes, young parents tend to drop out of school. … but, young couples, depending on age and documentation, may be eligible to register and wait for their benefit.
Teenagers may lose interest in studying due reasons detailed in sub-section 8.5.2[(1)].	Yes.
Changes in household composition.	Maybe: * yes, if children migrate and school cannot find whereabouts. * no, if children do not migrate and remain in school … but this affects their disposition towards learning.
Health problems and learning difficulties[(1)].	Maybe: * yes, if children stop going to school. * no, if children still attend school. … but this affects their learning and development.
Quality of education services[(1)]: * no free school meals; * mistreatment of students by school authorities.	Maybe: * yes, if children stop going to school. * no, if children still attend school. … but deserves investigation to urgently address these complaints.
Quality of health services[(1)].	Maybe: * yes, if it relates to health conditionalities, e.g. lack of vaccination due to difficult access. * no, if it does not relate to health conditionalities. … but potentially affects school attendance due to longer periods of school absence for treatment.
Financial circumstances.	Maybe:

Possible reasons that households do NOT comply with conditionalities	Does it lead to benefit cancellation?
	* yes, if families are required to work extra due to meagerness of benefit and precarious jobs (in-work poverty). * no, if they are able to work at different times than school hours or if they can negotiate an informal arrangement with teacher to work for certain number of days.
Importance of education in rural areas.	Maybe: * yes, if education is perceived to be not necessary for rural work. * no, if education is perceived to be necessary for local job market or as a long-term out-migrating strategy.

(1) The intra- and inter-municipality remoteness of PIR municipalities makes the situation of the persistently poor worse, leading to benefit cancellation for those who need it the most.

Source: author.

8.6 The benefit: collection, impact and adequacy

8.6.1 Benefit collection

The method of collecting benefits cannot be thought of as the simple act of households collecting the money. Different institutions (CAIXA, banking correspondents and CRAS) play a part, and households must interact with them; and there is the background within which households exercise their decision-making as to when and how to collect their benefits.

The effects of location and literacy are evident in the interviews. The location of the rural village influences the effectiveness – i.e. the real value – of the benefit. The more isolated a household is in relation to the local town, the more expensive it is to go to the town, and the less money is brought back to their homes. As discussed in Chapter 6, sub-section 6.3.3, households in PIR rural villages could spend on average between 7% and 59% of their benefit on transport.

> So, even paying the ticket, my husband had to go. He had to pay R$7 a return ticket. So, when the benefit was R$15, he would return with around R$7 …
> Me: Would you still go?
> It is like that, even so he would get the benefit (033ii BEN).

Inter-municipality remoteness influences the extent to which households can resolve BF card problems at the CAIXA, which is generally located at the nearest urban municipality. The persistently poor are, again, hit the hardest in terms of cost and lack of information. Some households I interviewed had borrowed money to travel several times to the nearest urban municipality, only to come back with the BF card issues still unresolved.

Strategies for collecting benefits varied according to remoteness. The persistently poor reported that they: (i) used the free school bus; (ii) waited for two months so as to get more money all at once; (iii) paid someone to collect the benefit on their behalf (an option that cost less than if household decided to use local transport to town); (iv) hired a private car with a number of other people also going to the nearest urban municipality to deal with CAIXA issues. In contrast, households in non-remote rural villages resorted to their bicycles or walked to the local town.

Literacy levels also influenced the ways in which people collected their benefit at banking correspondents. Higher literacy levels mean more independence in collecting the benefit, and more confidence in their social rights. Literate household heads tend to protect their password by memorising it and typing it themselves, whereas illiterate household heads give their passwords to tellers to type for them.

> Me: Do you type your password at the banking correspondent?
> No, they, the teller there does it, because I don't know how to read so ...
> Me: Do you let them do it?
> Yes (034nn BEN).

Banking correspondent staff confirmed this and justified their practice by saying that some households have difficulty typing their passwords, and this could result in their card being blocked after the third attempt. If that happens, the household head needs to travel to the nearest CAIXA at an urban municipality – a journey not easily undertaken.

8.6.2 Impact of the programme

A comparison between beneficiaries and non-beneficiaries demonstrates the impact of the BF programme. Non-beneficiaries informed me that they lacked food staples towards the end of the month. Some of them reported going hungry or only having a

very little to get by. Beneficiaries whose benefit had been cut reported that they now lived without essential staples at home.

Households that don't receive the benefit can only rely on informal networks for help. Charity and family assistance are both weak in remote rural areas, the former being sporadic and the latter being highly vulnerable themselves, with limited means to survive. Given the fragility of this type of welfare support, these families reported going without.

> [wife] What could I have bought, my lovely, without money? … Nothing! I lacked everything.
> [husband] There was no money, so, everything went missing. We had little food.
> Me: Did you eat what you planted?
> What we planted? There was nothing! So, during that time, I would grab my fishing rod, throw it over my shoulder and I would go down the hill to get some fish for us to eat, to 'get by', right? (045i NBEN).

Subsistence farming is not a reliable source of food or income. Agriculture is a high risk sector and, as explained in Chapters 3 and 7, the rural poor in both PIR and PNIR municipalities lived in areas where subsistence farming was precarious due to weather and soil conditions. Furthermore, farmers could not grow a sufficient variety of food to secure their nutrition levels. So, the idea that the rural poor can resort to farming and reduce their vulnerability levels, thus relying less on cash, takes no account of the conditions where some of the rural poor live.

Because school attendance is seen to be the primary conditionality associated with the BF (sub-section 8.5), it is the constant reference point for reported expenditure. There is an attempt to symbolically associate expenditures with "keeping children in school", although the main use of the benefit seems to be for food security.

For the persistently poor, conditionalities impose a harsh dilemma. The impact of the cash transfer is supposed to ensure that children attend school (so-called "substitution impact"), but it falls short of what is needed. There is the need for school uniform, shoes, and notebooks. Households reported having to choose between buying food and buying clothes.

> No, I want them to continue studying. But, I also want, I would like that they study and … that at least I can find a job that helps us buying clothes and shoes, because what is the point of them studying if I can't buy clothes for them? When they go to school, people say 'ah, these clothes you got are from the year before last year', because of what I was saying to you, 'you don't have good shoes to go to school'. It is not good to hear that from your son, it is not good at all (039ii NBEN).

Beneficiaries reported additional school costs for photocopying, materials and school meals. The fact that there are public policies with federal transfers to the school for some of these items, should raise a flag for further investigation.

8.6.3 The adequacy of the benefit to the policy objective

Let us suppose that the BF had only one objective – to fight poverty and food insecurity –this single objective is partially met, according to the persistently poor:

> so you analyse, six children studying, all the expense it is per month, so this here … this is not enough, it is only for the start, so we have to work because we can't just wait for the BF, we can't, right? We need a pair of shoes, we need some clothing, we need a notebook, so many things, so this what we have is only a small help, but it helps a lot, it is a small help (036n BEN).

The statement that the BF "is only a small help but it helps a lot" seems to be contradictory, but the contradiction is more apparent than real. The idea that the BF is "a small help" is repeated continuously in the interviews, mainly due to the meagre amount transferred to families, insufficient to meet the needs of large families. However, "it helps a lot" because it is a regular and stable source of income, which they did not have before. This statement also underlines the BF policy prescription that the BF is a "help", it is not a "right".

President Dilma has tried to address the inadequacy of the benefit rate with two measures implemented with the *Brasil sem Miséria* programme: (i) by increasing the upper limit to five children, instead of three; and (ii) by creating another benefit to address the poverty gap of households in extreme poverty (*Benefício para a superação extrema da pobreza*). The latter benefit is calculated as the gap between the household monthly income and the extreme poverty line.

The interviews were conducted before these measures were implemented, and hence any impact would not show up in my data. However, for at least two reasons the

impact of these two measures is likely to be minimal: (i) Why is the benefit capped at five children? If the aim is to provide access to public services, should families be given cash incentives only for the first five children to go to school? The sixth child or the eighth would also have costs in attending school. Why should they be penalised? (ii) How low is the extreme poverty line against which the new benefit is measured?

Table 1 and Table 2 (pp.63,64) show that the extreme poverty line is approximately 20% of the minimum wage. This minimalist critique of the absolute poverty line (generally measured in income and based on subsistence) has already been addressed by Townsend (1962) in his classic example of "drinking tea". Thus, in addition to the extreme poverty line being very low, it does not include needs beyond survival, such as "social needs" enables individuals to take part in the life in a community (Townsend 1985). These social needs were also clearly documented during fieldwork:

> You won't live only with those that live here [in the household], you have your visitors, you have people that relate to you besides your sons and daughters, because you will not live in a world only connected to your sons and daughters, only with your husband, of course you have to have your friendships. You have your neighbours, if they don't come from here … they come from further away, because you won't be friends only with your neighbours, you have friends outside. If they come you will not deny them a plate of food … The day she comes here and says I have no rice, no beans, no oil, no coffee, I swear to God, if I have it here we share it, we divide it, if anyone comes and I know s/he is in need, I will not have 4, 5, 6 packets of rice … I will not look at her/him and say 'no' … I will not deny it, we share and be whatever God wishes. We eat together (043ii NBEN).

The adequacy of the benefit for the rural poor in both PIR and PNIR municipalities is, therefore, questionable. The policy design fails to address the specific needs of the persistently poor, who incur higher costs to obtain the benefit, have more family members dependent on the household head (both children and adults), and have less access market employment to earn other sources of income.

However, as Atkinson (1991 p.38) cautions "It is not sufficient to say that the safety net could be made more effective by raising benefit levels. One has to ask why in the past benefits have been inadequate". Indeed, raising benefit levels so that the BF becomes a "universal panacea" is not likely to be the most effective policy

recommendation. But as this chapter shows, there is the need to understand the heterogeneity of the population targeted, and the several policy gaps that the BF is currently filling.

The context in which the BF was created has considerable implications for its role in the overall Brazilian welfare state. The BF started as a combination of different policies and continues to address different policy objectives. At the same time that the BF policy objectives are ambitious (objectives at page 61), the policy instrument of choice – CCTs – is of a residualist social policy nature. This contradiction mirrors the social context of the rights-based 1988 Constitution with the "restricted universalisation" and public-private provision of services.

This contradiction is also noted in the combination of social policies that make-up the Brazilian social protection system: universal health and education systems, social pensions and the targeted BF, filling in the void left by the non-existence of other social protection programmes In particular, the BF plays the role of:

- income maintenance support: by addressing the vertical equity principle of protecting low-income families by providing a stable source of income;
- (un)employment assistance: by targeting working-age households whose heads are in highly vulnerable working conditions – low paid and low skilled jobs in the informal sector; and
- child support allowance: by addressing the horizontal equity of redistributing income according to the higher costs of raising children. However, the BF has limited horizontal equity as it is restricted to three (or five) children per family.

The ambitious policy objectives, together with the structure of the social protection system in Brazil, have meant that BF policy is not adequate to address all of its objectives. Furthermore, it is being used to fill in the gaps left by the absence of other social protection policies that might address the needs of the families investigated.

8.7 Inspection mechanism and the persistently poor: the BF social council (ICS) and community participation

The BF legislation establishes the ICS as a social council mechanism and "community participation" as tools for ensuring that the programme is effectively reaching those that need it (*Lei 10.836, 09/01/2004, Decreto 5.209, 17/09/2044*). Community participation involves citizen oversight of the BF implementation, combined with provision for individuals to denounce beneficiary households they perceive as not eligible for the benefit. The *Instrução Normativa No.1, 20/05/2005* states the ICS functions, which I cite some below:

> Art 8, I, b) to identify potential beneficiaries of the PBF [*Bolsa Família*], mainly (…) those that are in extreme poverty, as well as requesting the state its registration;
> II, b) to request, with due justifications, to the local administration, the suspension or cancellation of benefits for families that are receiving the benefit without being eligible;
> III, a) to monitor the supply of local public services needed to fulfil the PBF conditionalities;
> IV In regards to complementary programmes, to follow and stimulate the integration and offer of other public policies that favour the emancipation of PBF beneficiary families, especially those who are not meeting the conditionalities …;
> VI, a) stimulate community participation for inspecting the PBF execution, in its administrative sphere.

This "community participation for inspecting" the BF requirement is expanded in a manual for the ICS issued by the Office of the Controller General of Accounts (CGU):

> It is very important that every citizen takes on the task of participating in the government's management, to monitor the usage of public funding through the activities of social control. Only with society's participation will effective control of public resources be possible. This would enable more adequate usage of available financial resources (Controladoria-Geral da União 2010 p.22).

The MDS has a 0800 phone number for people to call and report irregularities. These irregularities can also be reported to CRAS or to the ICS.

In theory, these methods should help to give priority to the poorest by contributing to a better quality *Cadastro*. ICS identification of those most need involves, not only

making sure that they are registered, but also making sure that the benefits are going only to eligible families. This is partly ensured by excluding families who have been granted the benefit "by mistake", and denunciations by a watchful public is one way of identifying those families, at least according to the official statements. The outcome is supposedly a better quality *Cadastro*, which could potentially help to give priority to the persistently poor. This sequence of events has already been reported by federal administration staff in Chapter 5 section 5.3.2.

However, both the households and the local administrations (Chapter 6, section 6.4.3) reported that households were reluctant to denounce anyone at the ICS or at the local administration. The vast majority of the interviewees said that they would not report an incorrect benefit allocation. Few of the household heads said they would report, although:

> it would not change a thing. People don't pay attention; they don't care about solving these things (042nn NBEN).

Households interviewed give five reasons for the reluctance:

(i) an assumption that relationships and informal networks will fill in the gaps left by the state and family;
(ii) fear of the consequences;
(iii) the understanding that different households have different needs;
(iv) believing that denouncing someone is wrong;
(v) a desire to distance themselves from the government.

First, there are few services offered by either state or market in PIR and PNIR municipalities. Thus, family, friends and other informal networks fill in the gaps in the provision of services. They provide child care services, emergency transportation to the nearest hospital and other types of transportation, and so forth. Life in a community not only contributes to a sense of belonging, it is also a major source of help.

> Me: What do you do if you get sick in early morning?
> We have to ask for our neighbour's help … Then you ask the neighbour to go there (hospital).
> Me: Do they charge you?

> No, it is based on friendship really … they don't charge anything (040n NBEN).

Households are afraid of the consequences of informing on someone. For the rural poor, who cannot purchase private services, relationships matter most and represent one of the components of their survival strategy. Others are afraid of retaliation. In the same way that they could wrongly denounce people, they could also be the target of somebody else's complaints. Therefore, they should keep on good terms with everyone.

> Everybody knows everyone here. No one would tell on others here … If anything happens you told on someone, that person would cut relationship with you. This is how it works here. It is serious. You cannot be meddling too much in other people's business. Each person knows their own needs (029i BEN).

> imagine if I put a complaint about others and I need it, [they] think that I don't, and look, my benefit is cut, God forbid … (030ii BEN).

Households also recognise that there are many aspects of deprivation and vulnerability, that poverty is not only money-related. They have an intuitive understanding of the limitations of the income poverty line. As the interviewees said: "everyone that receives it [the BF], does so because they need it" (029i BEN); "everyone needs it" (028n BEN); "I don't want it only for myself, everyone needs it, right?"(032i BEN).

Fourth, denouncing someone to the authorities is perceived to be the same as doing something bad to people, or starting a vindictive process. Some interviewees said that they did not know the material conditions of the other person's private life, and that this may result in the possibility of causing them harm.

> No, I don't have the courage to do it [put a in complaint]. I don't like it … I find it an ugly thing to do (039ii NBEN).

Lastly, households want to distance themselves from the work of the government. Households said that it was the local administration staff who conducted home visits and asked questions during registration, and they should have the knowledge to ensure that only those in real need are beneficiaries.

> because when they [local administration staff] register us in the local town, they ask us what we have to do the registration. So, they know who needs it and who doesn't, right? (027nn BEN).
>
> we here, we don't work for the Government, we don't (045i NBEN).

Again, the importance of community relationships is given priority. Given that there are high levels of mistrust between the households and the local administration staff (Chapter 6, section 6.4.1 and Chapter 8, section 8.3.2), households may not want the community to perceive them doing the government's work for it.

8.7.1 The observed impact of community participation in targeted programmes

During fieldwork, I observed how much discomfort households have with denouncing families that are receiving the programme without being eligible (at least, as they see it). Communities are tied by links of friendship, favours, debts and reciprocity, and targeted benefits to the poor seem to affect the social fabric of a community.

If the community is strongly united, the institutional mechanisms set up for the BF's "community participation" will most likely not be used. This is especially the case in poor rural municipalities, where people's dependence on others is strong, and where the state's presence and private opportunities for job creation are limited.

For communities that are not closely united, "community participation" through denouncing has the potential to create conflict and to fuel discrimination and social division. Households did report that they thought that benefits were being allocated to not-so-poor households, when there was a poor household that they knew of that was not receiving one. Given that the BF is not a universal benefit, and not based on entitlement, families understand that there are limited BF places, but they are reluctant to denounce anyone.

Although households can easily identify extremely poor households, accurate identification of the not-so-poor households may be prone to errors, as the extract in Box 11 shows. The calculation of benefit eligibility is complex. Level of income is not the only condition for receiving the benefit. There are complex rules for benefit allocation (section 5.3) and there must also be a municipal vacancy. The fact that there is no direct link between the exit of one family and the entry of another is also a

source of confusion for households. The spiral of further social division within communities, and mistrust between the local administration and the community, is set in motion.

Box 11: Community participation and community ties

Report from the wife of a pensioner, non-beneficiary, PIR municipality (043ii NBEN) .	**Report from a beneficiary, PIR municipality (033iiBEN).**
lots of people want to help me, [others] think that this pension he receives, for lots of people, they can't understand what it is to have a large family in a place like this, imagine this, that little pension he receives per month, would it be enough to cover everything with abundance? There is scarcity … because you can see here my condition … here, I didn't even have enough to build my own bathroom.	for example, if you were a pensioner and you had the BF card, the other person doesn't have the card and she supports her family with farming. She needs more than you, who are a pensioner and have a card, and she doesn't have one. Why? … So, she goes after you to talk … she doesn't have the card and you are a pensioner and have a card.

Targeted benefits to the poor reinforce the stigmatisation in the local community. Making the benefit targeted should mean that the poorest are given priority in receipt of the benefit. The national cap, the complexity of the programme, and problems with targeting and take-up rates result in poor families being excluded from the programme. Every family who receives the benefit, then, can be seen to be taking the place of another family, perhaps even one who needs it more. Beneficiary families should be the helpless, the voiceless, those who do not have a pension, and not those with anything that indicates they might be a little bit better off than those living in abject poverty.

Moreover, targeting itself reinforces the stigmatisation of the poor by society. For a beneficiary to continue receiving the benefit, they must continue to live in poverty. Thus people have to live their lives fitting into the categorisation of the targeted beneficiary – so that, if they fulfil the conditionalities, they indeed "deserve" to be helped.

In sum:

(i) How do the persistently poor, who live in the remote rural villages of PIR municipalities, participate in the BF programme?

Remoteness, understood as part of the background in which households live their daily lives, plays a very important role in determining the opportunities available for households to effectively take part in the BF programme implementation.

The persistently poor living in the remote rural villages of PIR municipalities face more challenges than those in PNIR municipalities in registering for the programme, obtaining their documentation, and making *Cadastro* updates. Inter- and intra-municipality remoteness has an impact on the households' ability to collect their benefits, to correct *Cadastro* errors, to go to CAIXA at the nearest urban municipality, and to fix improper cancellations.

Inter- and intra-municipality remoteness means lower real value of the benefit received, lower quality of schools and health services, reduced opportunities to diversify their livelihood options, and fewer opportunities to engage in specialised education or health services. The constraints imposed by the scant infrastructure impede the flows of information, resources, people and networks.

Reduced information flow, the complexity of the programme, and the limitations imposed by intra-municipality remoteness and low literacy, fuel mistrust between local administration staff and households. This has negative impacts on (i) the possibility of local administration staff understanding the particular needs of households, and (ii) households' opportunities to effectively take part in the BF programme or in other complementary programmes and policies run by the municipal social assistance.

The quantitative analysis shows that poor remote rural municipalities have lower levels of compliance with health conditionalities. The education dataset showed that illness, negligence/lack of interest, and 'unidentified' reasons were the main reasons recorded for low attendance at school. Issues that should have signalled the need for supply-side interventions were not adequately identified during the period analysed.

The findings in these municipalities raise a couple of issues, requiring further investigation. First, the large number of 'unidentified' reasons throws doubt on the effectiveness of conditionalities as a flagging tool to identify family needs and trigger complementary interventions. Second, the lack of service identification means that it is unlikely that conditionalities are being used as a mechanism to expose the need for supply-side interventions.

In the qualitative analysis, households' narratives point to financial and non-financial factors that might be barriers to their compliance with conditionalities. The BF addresses only the former factor, not the latter. The non-financial factors identified by this study, relate to knowledge, perceived importance of education and quality of services. Inter- and intra-municipality remoteness seems to influence the quality of services and the opportunity and ability for households to take-up education and health services.

The fieldwork found some possible examples of the 'non-identified' reasons for low school attendance, such as: household composition, household changes, health problems, learning difficulties, mismatch between school curriculum and rural job market, and quality of services. These reasons may also relate to the teacher's reporting of parent's "negligence" or "lack of interest". Remoteness can only exacerbate those reasons. Persistent poverty generates multiple factors that schools could find difficult to identify or to report only one of those factors. But, let us suppose that there is indeed the single growing cause of negligence/lack of interest: conditionalities are, then, insufficient to enforce continuous attendance. Furthermore, some of these reasons may be reported by the school using the conditionality system; others, such as service quality, may not.

Reports on lack of school meals and the mistreatment of children in education environments raise serious concerns about whether society is compulsorily exposing these children to such environments, through the use of conditionalities. Reconsidering the use of conditionalities and addressing the roots of these complaints must be a priority for the Brazilian government.

(ii) How do community-level mechanisms, such as the ICS and household participation, ensure that the persistently poor are given priority?

Participation of the local community should increase the quality of the local *Cadastro* by ensuring that benefits are not allocated to ineligible households, and by making sure that the poorest are registered. This chapter found that there is limited potential for this kind of participation in communities with strong ties, thus reducing the possibility of giving priority to the persistently poor.

Households living in communities with close social ties reported that they avoided denouncing anyone to the authorities, because of the importance of informal networks, the possibility of retaliation, the wrongness of the act, the intuitive understanding of the multifaceted aspects of poverty, and the need to distance themselves from the type of work that the local administration does, if they were to continue living in the community.

However, in communities without close ties, community participation has the potentially harmful effects. Denouncing other households reinforce discrimination and stigmatisation and encourage social division.

8.8 Conclusion

In this chapter, I analysed how households take part in the BF programme and whether they do so effectively or not. I began by investigating how the persistently poor register for the programme, meet the conditionality requirements, collect the benefit, and search for information. I also discussed possible reasons why poor households might be ineligible, and why eligible households might be excluded (problems of non-take-up). Persistently poor households become ineligible if they do not meet conditionalities or if they lack documentation, such as happens in cases of early household formation. If household composition changes, the movement of children into and out of different households and schools has an impact on benefit allocation, potentially leading to cancellation. Reasons reported by eligible families included not registering for the benefit due to stigma, and having difficulties with information and administration requirements. Examples of the latter included confusion about the household concept, difficulties in correcting their records at the *Cadastro* (and thus not being considered), and unwittingly letting their registration drop out of the system. For the persistently poor living in the remote rural villages of

PIR municipalities, location reduces the information flow and increases transportation costs, making administrative issues more difficult to deal with.

This chapter also analyses the question of whether the BF effectively meets the needs of the persistently poor. Based on their own life accounts, the persistently poor who live in the remote rural villages of PIR municipalities indicated that the programme did not effectively address their severe needs. The multiple deprivations imposed by location that the persistently poor face – remoteness, scant infrastructure, impeded flows of opportunities, resources, information and networks – require a specific set of policy considerations. If on top of that, one adds another layer of severe deprivations at the household level – low literacy, ill-health, low-paid employment, frequent household changes, migration – the claim made by CCT proponents, that these policies are intended primarily for the persistently poor, is hard to sustain.

Assessing the effectiveness of the two components of CCTs (cash transfer and conditionalities) against the policy objectives highlights the need for substantial reconsideration.

The primary policy objective of the cash transfer is to address poverty. The adequacy of the benefit for different household situations (age, composition, number of family members) was an issue raised by several interviewees. Although families reported they had more access to staple foods, the persistently poor still suffered embarrassment and shame. Poverty goes beyond the need for food, it also includes interactions riddled with constant negotiations around charity, favours and help. As well as food, people need clothes and shoes for themselves and their children, and a life of dignity and respect in their social relationships.

The justification for targeting cash transfers is that they can be directed to those who have the most need. The analysis shows how deleterious the effects of targeting are for social relations. This is shown by the stigmatisation of the beneficiary poor, who are expected to fulfil the conditions and not have the material goods that the rest of the community has. The selection process, based on means testing, generates mistrust in relationships within the community, and between households and local administrations.

Another BF objective is to build on human capital by improving children's access to health and education services, through the use of conditionalities. However, conditionality compliance does not mean better access to, or better quality of, services. Issues of inter- and intra-municipality remoteness, scant infrastructure and scarce human resources throw doubt on the quality of education and health services available at present and its future effects. The persistently poor living in remote rural villages are the most likely to be harmed by the imposition of conditionalities. Furthermore, improving the quality of education and health does not involve preconditions; it involves more investment in these sectors.

Lastly, there is the objective of graduating beneficiaries from the programme by exiting poverty. Persistent rural poverty needs to be addressed in so many ways that what is required goes well beyond the capacity of the programme. Analysing the impact of the benefit on the lives of the persistently poor, shows the limitations of CCTs for addressing their needs. Persistent poverty requires a long-term political commitment to finance policies that would go beyond social safety nets and temporary provision, and mostly importantly, would be based on social solidarity and recognition of the need for redistribution to households and geographical areas.

In the concluding chapter, I bring together the findings of the thesis in relation to how effectively the BF reaches out to the rural poor in PIR and PNIR municipalities. I also outline implications for future research and policy.

8.9 Appendix

Appendix 8A: Reasons for low school attendance, Ministry of Education

9 CONCLUSIONS, POLICY RECOMMENDATIONS AND IMPLICATIONS FOR RESEARCH

This life is difficult, but it was the one that God gave me,
what else can I do? (015ii NBEN)

9.1 Introduction

This thesis provides an analysis of whether the BF "maximises effectiveness" (Titmuss 1968 p.65), i.e. **if the *Bolsa Família* (BF) is effectively reaching out to the persistently poor in rural areas**. The BF was the main social policy from 2004 to 2009 during the research for this thesis, and it continues to represent a key role in the Brazilian social protection system. It is one of the very limited options available to the persistently poor for coping with life's adversities, as the above quotation indicates.

Given the data limitations to study chronic poverty in Brazil, I work with the premise that persistent rural poverty is predominantly located in remote rural villages, in what I have called Poor Isolated Rural (PIR) municipalities. This premise is based on studies on chronic and persistent poverty and chronic poverty in rural remote areas (RRA), and on national studies of the geographical distribution of persistent poverty, as discussed in Chapter 2. I compare PIR municipalities – local administration staff and households – with their counterparts in what I have called Poor Non-Isolated Rural (PNIR) municipalities. In these municipalities, I also researched the rural poor, who are also highly vulnerable, but who live in a different kind of geographical location: still in rural villages of poor rural municipalities, but close to a local town which, in turn, is closely connected to a nearby urban municipality.

Both PIR and PNIR municipalities are among the poorest rural municipalities in Brazil. These are municipalities with the highest number of poor households and with most of their population living in rural areas. This combination of high poverty levels and rural inhabitants means that these types of municipalities are likely to have high numbers of extreme poor. They are also mostly located in geographical areas known historically for their association with long-term and severe poverty, i.e. the semi-arid region of the Northeast of Brazil. These conceptual and empirical links

reinforce the methodological choices I made to conduct this inquiry into persistent rural poverty in Brazil.

Although I understand the limitations of this typology (see section 9.6), neither the lack of available data nor the imperfections derived from my attempts to identify the persistently poor, should be allowed to impede our research efforts. The tentative nature of this inquiry requires a qualitative methodology, and in fact such a methodology comprised three-quarters of the research effort.

Given its innovative methodology and the fact that this is a little explored field of research in Brazil, the research involved conducting several cross-checks to find out whether the typology indeed produced information about persistent poverty. This was examined and confirmed in Chapters 6, 7 and 8. Persistent poverty and the circumstances surrounding it were described in detail in local administration staff reports of public services and their observations of the local conditions of life, and in individual life history accounts of long-term and inter-generational experiences of severe poverty from the poor themselves.

In Chapters 1 and 2, I say that this thesis investigates the following questions:

RQ1: ***"How effectively does the Bolsa Família reach the rural poor in remote and non-remote poor rural municipalities?"***

RQ2: ***If it is not effective, why not?***

a) ***Reasons related to the policy design at the national level***
b) ***Reasons related to the local implementation at the municipal level***
c) ***Reasons related to the households' participation at the community level***

Chapters 4 to 8 provide an in-depth empirical examination of these questions using a mixed-methods approach on three levels of analysis: federal administration, local administration and household. This chapter puts together the main findings and policy implications, as well as suggesting areas for future research.

9.2 RQ1: How effectively does the *Bolsa Família* reach the rural poor in remote and non-remote poor rural municipalities?

I used a number of quantitative administrative datasets to answer RQ1. These descriptive statistics were the initial approach to addressing this question, and the basis on which the decision was made to pursue further investigation. In the case of BF participation rates by PIR and PNIR municipalities from 2004 to 2009, the findings from this quantitative analysis were mixed.

On the one hand, PIR and PNIR municipalities were found to have, on average, higher participation rates from 2004 to 2009 than rural municipalities overall. This is a positive finding as PIR and PNIR municipalities are among the poorest of rural municipalities. This finding (using participation rates and the municipality as the unit of analysis) confirms that of the BF literature, that the targeting of poor households is good.

On the other hand, however, although PIR municipalities have higher participation rates than the average of rural municipalities, they have lower rates of participation than PNIR municipalities. This is consistent throughout the years. Furthermore, PIR municipalities in the North of Brazil have lower participation rates than the average of the rural municipalities in that region.

I carried out another quantitative analysis comparing participation rates to poverty levels – i.e. take-up rates, using fitted regression lines and quartiles of distribution. One would expect that higher levels of poverty would translate into higher participation rates and that, over time, coverage would be higher in areas with higher levels of poverty, given that the programme was expanding.

The analysis showed, however, that the relationship between participation rates and poverty is not as direct as might be expected. This is demonstrated by the dispersion of the municipalities around the regression line. Some rural municipalities with high levels of poverty, such as those found in PIR and PNIR, had only low or medium rates of participation, i.e. they fell below the national regression line.

This finding indicates non-take-up problems for poor rural municipalities. It raises the question of whether more efficient municipalities may be "taking the places" of less efficient municipalities. Given the national cap on the number of benefits, it is likely that PIR and PNIR municipalities have medium rates of participation, not because they have only medium levels of poverty, but because their programme implementation is less efficient. This is explored in RQ2b.

The situation for the persistently poor in PIR municipalities is even more troubling than their situation in PNIR municipalities. There are higher proportions of PIR municipalities than of PNIR municipalities in the medium participation rate group, including most of the municipalities in extreme poverty (upper bound). This is shown by the relatively higher number of PIR municipalities below the national regression line, including many with high poverty levels. Remoteness also relates to low take-up rates. The more remote PIR municipalities are consistently below the regression line. Moreover, there has been a deterioration over time of participation rates in PIR municipalities in the North of Brazil. These quantitative analyses of participation rates and take-up rates showed that PIR municipalities fared worse than the comparison group of PNIR municipalities, indicating that there is a problem with lower take-up rates in PIR municipalities.

This finding urges caution in accepting the conclusions of the literature on exiting the BF that uses the PNAD and treats rural areas homogeneously. Averaging across all rural areas hides the worse-than-average outcomes for the rural poor living in remote areas. PNAD has no information that might represent the situations of the chronic or persistently poor living in PIR municipalities.

9.3 RQ2: If not effective, why not?

The quantitative findings discussed above suggested several possible reasons for the lower participation rates per poverty levels (i.e. take-up rates) in PIR municipalities. I investigated these possibilities using qualitative methods:

- **(RQ2a – national level)** Perhaps PIR municipalities have lower participation rates because they have met their local quota allocation and have effectively reached out to the persistently poor. To test this, I investigated:

i) how the policy design allocated the national quota to PIR and PNIR municipalities; and
ii) how the policy design ensured that the persistently poor were given priority during the national selection, considering the limited number of benefits at the national level.

- **(RQ2b – municipal level)** Perhaps PIR municipalities have lower participation rates because they are unable to reach out effectively to the persistently poor, due to deficiencies in their local implementation. To test this, I investigated:

  i) whether the location of PIR and PNIR municipalities influenced BF implementation; and
  ii) how the local administration ensured that the persistently poor were given priority in BF implementation.

- **(RQ2c – household level)** Perhaps PIR municipalities have lower participation rates because there are fewer household requests to take-up the BF programme. Either there are indeed fewer persistently poor living in PIR municipalities, or the persistently poor are unable, for reasons to be investigated, to take part in the programme. In the latter case, the BF is not effectively reaching out to the persistently poor. To test this, I investigated:

  i) whether the persistently poor were able to participate effectively in the BF programme, and if so, how; and
  ii) how the local mechanisms ensured that the persistently poor were participating effectively.

RQ2a) Reasons related to the policy design at the national level

The analysis, based on eight interviews with federal government staff, as well as on document analysis, has three main findings as explained below.

First, the calculations for the national quota are based mainly on the PNAD, while the allocation of the national quota to small municipalities is based on a comparison between the 2000 Census and the annual PNADs. Interviewees reported that this

method disadvantages PIR municipalities in the local quota allocations in two ways: (i) by not taking into account the diversity of intra-state poverty levels in allocating local quotas (this disadvantages both PIR and PNIR municipalities); and (ii) by distributing local quotas according to population growth – this results in PIR municipalities having their local quota redistributed to other municipalities within the same state because of their lower population growth[113]. This suggests that the policy design of the national quota allocation to local municipalities hinders the principle of maximising effectiveness, because it means that the persistently poor in PIR municipalities are most likely exposed to lower allocations than they should receive, given their levels of poverty.

Second, the analysis suggests that, during the initial years of the BF implementation, the local quota was used only as a guide. Although this could be seen as a positive finding, in fact municipal capacity influenced participation rates. This again disadvantaged PIR and PNIR municipalities, given their lower municipal capacity. This reaffirms the hypothesis that PIR and PNIR have their quota "taken up" by more efficient municipalities. Thus, neither the local quota nor the take-up rates necessarily reflect the total number of poor households in a municipality. The influence of municipal capacity on participation rates is addressed in RQ2b.

Third, the policy design for the selection of beneficiaries does not give priority to the persistently poor. Even if the local quota reflected the number of poor households, the selection process does not ensure that it is the persistently poor who receive the benefit first. The order of priority for benefit allocation does not take into consideration persistent poverty, rural poverty, or geographical areas with high levels of poverty (PIR and PNIR). Benefits are allocated in the following order: (i) indication processes and social vulnerability categories listed in Article 7 (*Portaria GM/MDS 341, 7/10/2008*), which includes recipients of pre-BF social assistance programmes, mostly in the urban and semi-urban Northeast of Brazil; (ii) municipalities with low coverage against the local quota (article 8, §1), which

[113] The rural-urban linkages of PNIR municipalities mean that they are likely to have higher population growth than PIR municipalities. The growth of medium-sized municipalities in Brazil can result in a positive neighbourhood effect in PNIR municipalities. This deserves further quantitative investigation (section 9.7). See IBGE (2011b).

disadvantage PIR municipalities; and (iii) households with low incomes and high dependency ratios (article 9), not necessarily the persistently poor.

Together, these three findings suggest that the policy design at the national level does not effectively maximise its potential to reach the poorest municipalities, like PIR and PNIR, or the persistently poor households, whatever their geographical location. The policy design of the BF is particularly inappropriate to reach out to the persistently poor living in remote rural municipalities. To start with, in PIR municipalities disadvantaged by a comparatively lower allocation of the local quota, the persistently poor have less chance of being allocated benefits; then, if the municipal capacity to run the programme is inefficient, the persistently poor have less chance of getting registered; and finally, even if the persistently poor are able to enrol and they are in competition for the benefit, the selection process does not necessarily give them priority.

The fact that there are a number of eligible families, registered at the *Cadastro*, but without the benefit is most worrisome. Based on the findings above, there is a possibility that the poorest of the poor may not be receiving the benefit primarily intended to reach them.

RQ2b) Reasons related to the local implementation at the municipal level

I use primary data collected from 14 interviews with local administration staff in four case studies to answer this research question.

The municipal-level analysis shows that remoteness does influence local infrastructure, and hence, BF implementation. Inter-municipality remoteness – i.e. the distance between PIR/PNIR municipality and the nearest urban municipality – influences local infrastructure, human resources and transportation. Intra-municipality remoteness – i.e. the distance of the rural village from the local town – influences the dissemination of information, registration, and the quality of the *Cadastro*. The more remote a municipality or a rural village, the more difficult it is to obtain qualified professional staff, the lower the quality of services, and the higher the transportation costs.

On top of the challenges posed by remoteness, which gives the analyst a "picture", there is imposed another layer comprising flows, a geography of movement. It is in these flows, underpinned by remoteness and infrastructure, that the BF is implemented (as per the analytical framework in section 3.5). The flows of information, people, resources and networks in PIR municipalities are sporadic, alternating with no movement at all. This is shown by the reluctance of qualified professionals to stay very long in PIR municipalities, and the restricted dissemination of information and knowledge limited by the scarcity of training and infrequent home-visiting in remote villages. PNIR municipalities, on the other hand, have both a higher volume and a higher frequency of flows. This is shown by the constant movement of qualified staff in and out of the municipality to work during the week and return home during the weekend, by the easier access to training in urban municipalities, and so forth.

This analysis suggests three conclusions. The first conclusion is that reduced infrastructure and implementation capacities can result in lower participation rates, despite high levels of poverty. Local staff from poor rural municipalities, particularly PIR municipalities, reported that they were not being well equipped to implement the BF programme effectively. They also complained about the effects of inter-municipality remoteness on the frequency of training, the likelihood of employing qualified staff, basic CRAS infrastructure and equipment, and staff turnover. They also complained about the lack of policy consistency due to local political interference in contracting practices, or the reshuffling of public servants. Local infrastructure influences on how local administration staff is able to overcome intra-municipality remoteness and reach out to the persistently poor living in rural remote villages.

The second conclusion is that, in PIR municipalities, the limited infrastructure and flows of information, resources, people and networks, make the implementation process slow and costly, reducing the possibility of effective inclusion in the BF programme of the persistently poor living in rural remote villages. The findings above raise serious doubts about whether local staff from PIR municipalities are able to ensure that the persistently poor are effectively registered for the programme at the *Cadastro*. Staff in PIR municipalities are unable to conduct frequent visits to remote

rural villages to disseminate information on the programme, to enrol potential beneficiaries at the *Cadastro*, to "actively search" for the persistently poor, or to conduct home visits. They have limited access to training and to the internet, and are less likely to solve *Cadastro* issues promptly. Staff have also reported that there is limited community participation in the BF social council (ICS), the function of which is to ensure the poorest are enrolled in the programme.

The third conclusion is that late registration of the persistently poor could have resulted in reduced chances for taking up benefits, as the majority of the benefits were already allocated by the time they were able to enrol. Local staff from PIR municipalities reported that, during the initial years of the BF programme, expansion happened primarily in the urban areas of rural municipalities. Staff from both PIR and PNIR municipalities reported that, during the initial years of the BF implementation, CRAS lacked basic infrastructure in the form of cars, computers, professional staff and adequate buildings. This indicates that the persistently poor living in isolated rural villages were expected to register themselves at the local town, and this happened only to a limited extent. Another important fact to keep in mind is that from 2004 to 2006, the BF programme had a steep growth of participation rates, but that this tapered off once the national cap was reached.

Overall, the municipal-level analysis indicates that poor rural municipalities, particularly PIR municipalities, do not have sufficient local infrastructure to effectively maximise BF implementation in its efforts to reach out to the persistently poor. Thus, there are barriers to the BF implementation in rural remote areas that reduce the effectiveness of the BF in these locations. This can result in lower participation rates despite high levels of poverty, and in less emphasis on ensuring that the persistently poor take part in the programme.

RQ2c) Reasons related to the households' participation at the community level

The analysis based on protocol observations, service profiling, field notes, maps, and 22 household interviews evenly spread between the four case studies suggest that PIR municipalities have lower participation rates than average, but that not all possible beneficiaries already receive the benefit. Rather, the lower participation rates are due

to the fact that the persistently poor, for the causes reported below, are unable to effectively take part in the programme. There are five main findings.

First, the in-depth understanding of the structural context of remoteness and of reduced flows limit the choice set and life prospects of the persistently poor households. Public services, if present, are limited and of questionable quality. Employment opportunities are mostly informal and require negotiations that reinforce power differences and stigmatisation. Migration is often a livelihood strategy used by the household head to cope with limited income (i.e. "living like birds"), but this also shows how family living may be limited for those in poverty. This chapter shows why the persistently poor are the "hard-to-reach". As Galbraith (1958 p.257) said: "Poverty is self-perpetuating because the poorest communities are poorest in the services which would eliminate it".

Second, this thesis reports the accounts of the persistently poor in relation to: the effect of inter- and intra-municipality remoteness on obtaining their documents; BF registration and *Cadastro* updates; collecting benefits; opportunities to engage with CAIXA or with specialised education and health services; and their search for information, including solving problems with *Cadastro*.

Third, remoteness has a direct impact on the real value of the benefit received. The persistently poor living in remote rural villages of PIR municipalities spend more of their benefit in transportation costs, and in the local shops because of the higher prices. They are also more likely to incur higher costs for specialised health and education services, and for correcting benefit-card errors at the *Cadastro* or CAIXA.

The fourth finding from the quantitative analysis of MEC and MS datasets is that the BF is not addressing the needs of the persistently poor. In the first place, PIR municipalities have lower than average compliance with health conditionalities. The qualitative analysis uncovered the following possible causes for this lower compliance: limited municipal capacity to monitor the compliance (Chapter 6); lesser health infrastructure in PIR municipalities (Chapter 7); the time required in the transportation to health clinics; less information available about health conditionalities than about education conditionalities; the low quality of health

services; and the use of services elsewhere than in their local municipality (Chapter 8).

Then the education datasets illustrated a growing trend of unidentified reasons for low school attendance in PIR municipalities. In addition to unidentified reasons, there is a higher number of negligence/lack of interest reported reasons in PNIR municipalities for low school attendance. The fieldwork uncovered some reasons that could have been included in the 'unidentified' category. Some of these reasons were financial, but there were others that are not addressed by the cash transfer benefit, such as household changes, household composition, health problems, learning difficulties, a mismatch between rural work and school curriculum, and the quality of services. 'Lack of interest' could be the result of several factors, such as a mismatch between education and the rural job market, problems with the quality of educational services, the influence of remoteness on rural youth perceptions of their livelihood options, health issues, and changes in life circumstances (household changes, migration, *etc*.) that influence a student's disposition towards learning.

Furthermore, the investigation of conditionalities throws doubt on the claim that CCTs are the best way of addressing chronic or persistent poverty because they build on education and health outcomes of children. The analysis of households shows that the persistently poor have a multitude of needs that require other services in addition to cash transfers. It also shows how inadequate the benefit is for highly vulnerable families, such as single mothers with large families, and people of workforce age with chronic illnesses. Furthermore, structural conditions explored in Chapter 7 show how difficult it is for the persistently poor living in remote rural villages to comply with conditionalities. And what is most worrisome is that, even if the persistently poor do comply, the chances are that they will remain in poverty, given the meagreness of the benefit to address short-term needs and the poor quality of the services to develop long-term opportunities.

This analysis also exposes the lack of emphasis on supply-side interventions, normally hidden by the emphasis put on household compliance. The poor data quality, demonstrated by the large numbers of 'unidentified' reasons given for poor school attendance, mean that education conditionalities are unlikely to serve as

flagging mechanisms for families in need of social assistance services, or for the state to improve supply-side interventions.

The fifth finding from the qualitative analysis of interviews with households is that aspect of the policy design that promotes community participation through the monitoring of the BF implementation (including of benefit allocation) is unlikely to ensure effective implementation of the programme. This aspect is supposed to be a form of democratic decentralisation through community participation that would be beneficial for the implementation of the BF programme, because correcting programme inefficiencies by denouncing incorrect benefits would ensure that the poorest would receive the benefits. But combining community participation mechanisms, either through ICS or individual denouncing, with targeted benefits has very different outcomes from those envisaged by the programme's planners. In close-knit communities, there is little likelihood that anyone will be denounced; whereas in communities without strong ties, denouncing reinforces stigmatisation, discrimination and social division. However, the BF selection process (as explained in Chapter 5) does not necessarily mean that one incorrect benefit allocation that is cancelled will result in the inclusion of the poorest family in a given municipality. In neither case is it likely that surveillance of benefit households by the general population will ensure that the poorest receive the benefits.

The five findings above suggest that the BF is not maximising its effectiveness in reaching out to the persistently poor in rural remote areas, as a result of both inappropriate design, such as the use of conditionalities for this population, and barriers that household face to effectively enrol and participate in the programme. Some of the persistently poor are not able to take part in the programme at all, due to problems with registration, compliance with conditionalities, *Cadastro* problems, *etc*., while others, who are beneficiaries, are not having their basic needs met. The persistently poor who live in the remote rural villages of PIR municipalities are likely to incur higher costs to take part in the programme than those living in close proximity to the urban municipality. Higher costs mean less money brought back to the villages to meet their own needs.

I started the analysis of this thesis with the concept of maximising effectiveness, i.e. whether the main social policy from 2004 to 2009 reached those who are in most need, the persistently poor. Throughout the chapters that followed the concept of effectiveness was analysed from different point of views – from the national perspective, the local administration perspective and, in this last RQ, the households' perspective. The concept of effectiveness for households is analysed according to how the programme addresses some of its stated objectives: (i) fighting poverty; (ii) promoting access to services; and (iii) providing an exit out of poverty. In another words, effectiveness is assessed according to how the programme is effectively meeting the needs of the persistently poor.

According to the persistently poor interviewed, without the BF "people would feel sick, sick of starvation" (045i NBEN), but the BF "is only a small help, but it helps a lot" (036n BEN). So, "we have to work because we can't just wait for the BF" (036n BEN), because "it is not enough. The money … I pass by the local shop and leave it there" (039ii NBEN). Other needs are left unmet "because what is the point of them studying if I can't buy clothes for them?" resulting in shame, embarrassment across generations, "When they go to school, people say 'ah, this clothes you got is from the year before last year' … It is not good to hear that from your son, it is not good at all" (039ii NBEN). But "what else to do if you live in a place like this?" (043ii NBEN).

The persistently poor living in the remote rural villages of PIR municipalities indicate that, even when they are beneficiaries, the programme does not effectively address their severe needs.

9.4 Thesis summary

This thesis' main conclusion is that the design of the programme is inappropriate for rural remote areas and that there are barriers to the implementation of the BF in these areas that reduce the effectiveness of the programme. This is demonstrated by the following evidences derived from the empirical analyses. First, despite higher levels of BF participation rates in poor rural municipalities than the average rates in rural municipalities, the BF has lower participation rates in PIR municipalities than in PNIR municipalities. The findings suggest the possibility of relative lower participation (or lower take-up rates) in PIR municipalities, especially in the poorest

and the more remote of them. Second, the policy design for municipal quota allocation, for BF expansion, and for selecting the households, have most likely reduced the chances of effectively maximising participation rates in PIR municipalities, and the chances of giving priority to the persistently poor. Third, the municipal-level analysis showed that PIR municipalities are not well-equipped to effectively maximise BF implementation to the persistently poor in remote rural villages. Fourth, the persistently poor living in the remote rural villages of PIR municipalities reported their difficulties in registering for the benefit, in constantly updating their registries, in complying with conditionalities and in collecting benefits. They also indicated that the BF does not effectively address, or only partially addresses, their material and social needs. Finally, this thesis shows how persistent poverty is produced and reproduced through the interplay of households with socio-economic-political institutions, norms, locational factors and geographical flows. Thus, the BF programme does not maximise its effectiveness in meeting the needs of the persistently poor that require the long-term social policies aimed at overcoming the structural causes of persistent poverty in severely deprived geographical areas.

9.5 Originality

This thesis is an original and multidisciplinary approach to understanding how effectively the BF reaches out to the persistently poor. In the first place, this thesis uses innovative methods to identify potential areas of persistent rural poverty in Brazil. It also involves a hitherto unexplored analysis of the BF taking into account persistent poverty in rural areas and remoteness.

To my knowledge, there is no quantitative longitudinal dataset investigating chronic or persistent poverty that is representative for small rural municipalities. Thus, this study proposes the investigation of persistent poverty, addressing parts of this knowledge gap, and being the first to use the following methods:

- Following on from the existing theoretical and empirical research into chronic and persistent poverty, remote rural areas and rural development, I used maps, with geographic coordinates, to categorise municipalities based on levels of poverty, urbanisation and remoteness. I created a typology of two categories

that I used throughout the thesis: Poor Isolated Rural (PIR) and Poor Non-Isolated Rural (PNIR) municipalities.

- The multidisciplinary analytical framework looked at policy in the context of locational factors and geography of flows, and would enable policy makers to consider short- and long-term policy recommendations. The method, combined with the analytical framework, could be used as an alternative policy tool for the analysis of rural and social development programmes.
- The lack of studies on persistent poverty and remoteness in Brazil meant that I had to conduct several levels of qualitative data analyses to verify the typology and to cross-check the quantitative findings. Thus, I conducted an extensive qualitative fieldwork at three-levels of analysis (national, municipal and household-levels). The originality, in this case, is the combination of several levels of qualitative datasets with a quantitative dataset based on various administrative data and geographic information system maps.

The analysis of the BF programme is also innovative for the following reasons:

- As far as I know, there is no study that investigates the intersection between persistent or chronic rural poverty and remoteness in Brazil.
- As far as I know, there is no BF study that investigates policy implementation in the context of (i) persistent poverty, (ii) remote rural areas, or (iii) the intersection between persistent poverty and rural remote areas.
- Previous research investigating rural poverty and the BF has been based on poverty estimates derived from the Census, PNAD or *Cadastro*. This thesis uses different methods, given the limitations of these datasets (as explained in Chapter 3), and contributes to the body of literature on the BF programme with results produced by these different methods.
- To my knowledge, there is no BF research that empirically combines the investigation of rural-urban linkages and their influence on rural poverty and on the implementation of the BF programme.
- The investigation of these linkages created the terminology of inter- and intra-municipality remoteness, used to investigate how the locations of rural villages and the locations of rural municipalities influenced programme

implementation. Such a study on the BF, to my knowledge, has also not been conducted before.

- The thesis provides innovative insights into the BF policy recommendations regarding the heterogeneity of poor rural municipalities (PIR and PNIR municipalities), and the heterogeneity of remoteness (inter- and intra-municipality).

9.6 Limitations

This thesis is about only a small sub-set of rural municipalities – the poorest. The findings are confined to this sub-set and do not invalidate findings from other studies based on household surveys and censuses. The findings, however, do suggest caution in interpreting what surveys and the Census say about rural areas, especially treating them as a homogeneous group.

The typology of PIR and PNIR municipalities was constructed using the following variables: poverty headcount; higher percentage of the municipal population in rural areas; and distance to the nearest urban area. The 'distance' variable is unlikely to have changed substantially during the period analysed, 2004-2009. I constructed it by taking into account the distances between a PIR or a PNIR municipality to the nearest urban municipality according to the network of transportation, instead of a straight line. However, there are some limitations in relation to the 'poverty' and the 'rural' variables. Although PIR and PNIR municipalities are likely to be still in these categories, as the most updated Census continues to indicate high levels of deprivation and poverty in rural areas of the Northeast of Brazil (Chapters 2 and 3), the poverty estimates dated from before the BF programme. The MoPI needs to be updated to reflect current estimates for small municipalities. As for the definition of rural areas, given that it falls under the municipality law, it is not standardised. It also carries the assumption that the main local town is necessarily urban.

That the persistently poor are those predominantly living in remote rural villages of PIR municipalities is a premise only. Obviously, not all the persistently poor live in PIR municipalities, and not all inhabitants of isolated rural villages are necessarily poor. I try to overcome this limitation by systematically working in comparative terms (PIR and PNIR), and by looking at trends (participation rates from 2004 to

2009) instead of measuring point estimates. I was also very careful to investigate four rural municipalities, and to design the qualitative sample in such a way as to ensure variety and extensive fieldwork. This geographical limitation, however, could also be perceived as a methodological strength, considering that it situates persistent poverty within structural rural-urban linkages and areas with low geographical and human capitals, an unexplored debate for BF analysis in Brazil.

Research on persistent poverty and remote rural areas, and the overlap of social policies in these areas and for this population, are unexplored fields. This means that the knowledge generated by this thesis will most likely need to be reassessed as research in these areas develops and the body of evidence grows.

Policies like the BF are not rigidly set and can benefit from feedback about implementation mechanisms. This means that research on public policy, like that reported in this thesis, is limited by its very nature, by the constant need to update collected information, and by constant policy adaptation.

9.7 Implications for future research

9.7.1 Persistent poverty and rural remote areas in Brazil

While this thesis presents the case that persistent poverty is closely associated with remote rural areas in Brazil, this is still an unexplored topic. Further studies could reinforce the strength of this association, using other programmes, methods and other disciplines. The current government focus on eradicating extreme poverty in Brazil should not ignore persistent poverty.

The examination of persistent poverty in this thesis does not capture poverty dynamics quantitatively. I tried to circumvent the lack of data by employing several methods and different layers of information, such as quantitative mapping and datasets, geographical analysis of remoteness and links, and qualitative accounts of geographical flows, household life-histories (including inter-generational poverty), and contextual in-depth analysis.

However, it would be valuable if chronic and persistent poverty were studied using longitudinal panels containing both households and geographic characteristics.

Special consideration should be given to small rural municipalities and their geographical location. There are several questions that require multivariate regression analysis, including spatial regression, for example:

- To what extent is chronic and persistent poverty in the remote rural areas of Brazil a result of socio-economic, municipality or geographical factors?
- How does the proximity to urban municipalities contribute to poverty levels in rural municipalities?
- Do the chronic or persistently poor tend to concentrate over time in areas with low geographical capital or are those areas becoming more depleted over time due to the concentration of chronic or persistent poverty?
- How much do geographical variations influence the depletion of assets and capital, hence deepening poverty?
- How much does the lack of municipal services influence spatial segregation?

There are a number of additional tests that I would like to run in the future to assess how the typology of PIR and PNIR municipalities would vary with different measures and different variables, for example:

- calculating population estimates using the 2010 Census, rather than the PNADs;
- comparing PIR with PNIR municipalities using other poverty indices (Human Development Index, poverty gap, square poverty gap);
- including municipal-level variables, such as funding available, levels of federal transfers, service provision and land distribution;
- including other geographical variables, such as soil quality, rainfall, soil erosion;
- overlaying remote sensing information to analyse PIR and PNIR municipalities according to desertification levels.

9.7.2 On the Bolsa Família programme

The findings of lower take-up rates in municipalities with high poverty levels suggest that there were some PIR and PNIR municipalities that were less equipped to effectively implement the BF programme during the initial expansion years.

Although I build this case through RQ1, RQ2a and RQ2b, this hypothesis deserves further investigation. One way to carry out an alternative analysis would be to match the information from the *Cadastro* dataset monthly with the municipality typologies, their local quotas and poverty levels. This would give some indication of how take-up rates changed through the years according to allocated local quotas and the municipal poverty levels registered at the *Cadastro*. It would require substantial government clearance.

The findings reported in Chapter 5, showing how the BF national quota was allocated to local municipalities, came mostly from interviews with key federal administration staff. There is limited research on the topic although this is a well-known area for state bureaucrats. Research generally acknowledges the use of PNAD as the source of the national quota, as well as the use of geographical targeting by municipalities. How the allocation is conducted, and what mechanisms are used to check that geographical targeting happens, are questions that deserve more research.

How the selection process happens is another area that requires more investigation. The selection process analysed in Chapters 5, 6 and 8 is still a black-box, and requires more research and greater transparency. Even though it is outlined in the legislation, it is not readily comprehensible (it was, I confess, a challenge for me). The selection criteria need to be methodically assessed by independent researchers, so that policy makers are aware of the trade-offs that happen in benefit allocation priorities.

The lack of studies in these two areas (local quota allocation and the selection process) made it difficult for me to cross-check the accuracy of what the federal staff reported. But that doesn't diminish the importance of this topic, nor does it invalidate this initial attempt to trace how these two processes were conducted from 2004 to 2009.

9.7.3 Wider research agenda

I base my main findings mostly on four case studies (Chapters 6 to 8). Although this thesis draws policy implications from only four case studies, I do so in order to address the main justification behind CCTs: that they are intended to reduce chronic and persistent poverty by promoting human capital development.

Given this justification, there is an urgent need to conduct more research investigating whether CCTs do have an impact on levels of chronic and persistent poverty, given the popularity of CCTs with the governments of developing countries. I would also argue that this research should include comparisons with the effects of unconditional cash transfers, so that the effects of conditionalities on the chronic and persistently poor can be adequately assessed.

This thesis also calls attention to two other issues: (i) relying on "the law of averages" through the homogeneous treatment of rural areas and poverty; and (ii) measuring policy "success" only in terms of costs, efficiency and short-term outputs. These two concerns were already signalled by Townsend and Titmuss, respectively:

> Social and economic truths can often be blurred or concealed in inquiries which depend on an over-assiduous application of the law of averages (Townsend 1962 p.218).
>
> The objectives of social services (from university education to social work) are not to make profits and to administer prices – unlike private markets … what is success for a mental hospital? … Success for the hospital may mean more demands on other agencies (Titmuss 1974 pp. 51, 52 , 53).

While I acknowledge the importance of averages for policy prescription, poverty analysis would benefit more from disaggregation of the data, especially when investigating extremely disadvantaged groups. It can also benefit from the integrating effects of a multidisciplinary approach, such as including geographical spatial analysis in working with remote rural areas, to investigate the geographical placement of services, say, in the light of temporary migration flows, *etc*.

Evaluation studies of public policies tend to focus on the maximisation of the use of public funding through the most efficient allocation of benefits. Although I also recognise the importance of efficiency, policy prescriptions with this rationale work with short-term outputs. When evaluators focus exclusively on efficiency, there is the possibility of missing the point of the resulting synergies between policies and of expecting efficient policy outcomes from groups that may require long-term policy "investment". Moreover, the effective outcomes of social policies that interact with each other are difficult to measure accurately (if they can be measured at all).

9.8 Policy recommendations: beyond cash transfer for the persistently poor

The policy recommendations below are timely for several reasons. Social assistance in Brazil is still under consolidation, and programmes like the BF are part of the electoral and political debates, as they are not a guaranteed right.

It is true that Brazil has recently lived through a period of unprecedented reduction in poverty and inequality, due to the combination of modest economic growth, labour market and social policies, including the BF. However, even after this initial reduction, there were still nine million Brazilians living in extreme poverty in 2009 (Osorio *et al.* 2011a p.7). In other words, after reducing the numbers of those "easy to assist", Brazil is now left with the "hard to assist" poor, i.e. the chronic or persistently poor, those "hardest to reach".

In 2011, in an effort to address this, President Dilma Rouseff created the new *Brasil sem Miséria* (Brazil Without Poverty) programme as a way of focusing on fighting extreme poverty. This programme incorporates the BF at its core. However, MDS acknowledges that three challenges remain: (i) to promote the "active search" in order to identify families that are excluded from public services; (ii) to improve the "graduation" agenda (exit strategy) by promoting labour market inclusion policies; and (iii) to improve the quality of public services. This thesis addresses these challenges and it can contribute to this debate with its investigation of ways in which the BF can be improved upon to address the needs of the persistently poor.

Researchers have suggested that chronic poverty requires different policies from transient poverty, focusing on redistribution, structural bottlenecks and access to basic services (CPRC 2005; Hulme & Shepherd 2003). This is certainly the case. Thus, instead of narrowly focusing the targeting on the extreme poor, as proposed by *Brasil sem Miséria*, I propose the opposite. This is at first sight a counter-intuitive strategy, but to reach the persistently poor, it is necessary to broaden the benefit base. For the persistently poor living in rural remote areas, the use of targeting, together with the national cap and conditionalities, would harm them the most.

The analysis of intra-municipality remoteness and flows suggests the following short-term policy implications for the BF policy implementation:

- improvement in local municipal capacity, including priority given by the state and federal government to municipalities with high levels of poverty, and more resources, both in-kind and services, to those localities;
- continuation of the MDA's logic of rural territories, but with geo-referencing of services and additional concepts of linkages and flows;
- revising practices of contracting and reshuffling local staff; and
- auditing of educational programmes in remote rural municipalities such as the free school meal, and establishing mechanisms to ensure that resources are reaching schools;

The analysis of inter-municipality remoteness and flows suggests the following long-term structural policy recommendations:

- exploring synergies between the BF and rural development programmes;
- focusing on land redistribution and land titling policies;
- returning to regional development strategies;
- improving water distribution, water quality and sanitation in poor rural municipalities and villages; and
- improving the quality of roads and transportation.

Of course, there are no simple answers to the persistent poverty problem. Above all, policies involve trade-offs, and these depend on political feasibility. A good starting to address both the BF policy implementation and design point would be:

- identifying the PIR type of municipality, mapping the geographical flows of service provision, and paying more attention to how policies are implemented in these municipalities;
- constructing a policy framework that takes into account RRAs in Brazil;
- focusing on the quality of education and health services; and
- reconsidering the use of targeting, the national cap and conditionalities, mainly for the persistently poor living in rural remote areas.

Although this thesis specifically investigates the persistently poor living in rural poor areas, the policy recommendations above represent a move towards transforming the BF into an unconditional universal rights-based programme. If demanded by

Brazilian society, unconditional programmes could still have school and health requirements monitored by local municipalities and reported to the national level. This, however, has a different mentality from the current BF programme, focused on improving supply-side services and individualising social assistance services, rather than on targeting and conditionalities.

9.9 Long-term social policy goal: CCTs for the persistently poor in rural areas?

With the expansion of CCTs in developing countries and the post-2015 development agenda, this thesis is timely and relevant. The structural causes of the continued exclusion and marginalisation of the population living in RRAs, undermine the case for using CCTs as a long-term social policy strategy for addressing chronic and persistent poverty.

The current narrative for CCTs is that they are cost-efficient, redistributive and especially suitable for the persistently poor. This thesis shows that, although cost-efficient (costing less than one per cent of GDP), they do not necessarily maximise effectiveness in reaching out to the persistently poor in rural areas - both in terms of effective delivering public services and in meeting the beneficiaries' social and economic needs-, that redistribution is questionable, and that they are unsuitable for the persistently poor, due to policy design and implementation barriers. This is specially the case of the persistently poor in rural remote areas, where services are non-existent, difficult to access or of low quality. Furthermore, CCTs reinforce social division and stigmatisation.

For the persistently poor to have a different life perspective, adequate income and, also importantly, services are necessary. Otherwise, the persistently poor are denied their right to full membership in society, inequality is normalised, corrupt practices are pervasive, and persistent poverty is legitimated as a by-product of individual poor choices. Although the market, families and civil society have their own roles to play, there is need, too, for an effective welfare state, for social redistribution between households and regions, and for social solidarity. Meanwhile, we keep hearing the question: "This life is difficult, but … what else can I do?" (015ii NBEN)

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11 APPENDICES

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Chapter 3 Appendices

Appendix 3A: The Map of Poverty and Inequality: the variable poverty

This appendix is a brief methodological overview of the Map of Poverty and Inequality (MoPI), and the methods used to calculate poverty and to estimate it in small areas (or municipalities). I first explain how poverty lines were defined and calculated, followed by how poverty was estimated for municipalities.

Poverty lines based on the Household Budget Survey (POF)

The MoPI poverty lines were based on household consumption, using the 2002-2003 POF (IBGE 2008a). The extreme poverty line was calculated using the minimum daily food intake according to the World Health Organisation method measured in *per capita* calories in relation to age, gender, location, body mass, height and level of activity. After estimating the calories consumed *per capita* by each subgroup (urban/rural, region and so forth), IBGE identifies a reference group to determine the minimum income required to meet the minimum food requirements. The identification of required minimum income was constructed based on 81 mobile quintiles (0%-20%, then 1%-21%, *etc.*). The reference group was the first mobile quintile with the lowest total income per capita to satisfy on average the estimated calories required.

As for the poverty line it was calculated using both food and non-food items. Given the difficulties in estimating non-food items, IBGE uses a multiplier of the extreme poverty line. The multiplier for rural areas (1.75) differs from that of urban areas (2.00).

After the income poverty thresholds were calculated (totalling 40 lines: 20 poverty lines and 20 extreme poverty lines), a small-areas estimation method was used to estimate poverty and inequality in Brazilian municipalities.

Municipality poverty estimates: the small-areas estimation method

Generally, a detailed profile of poverty index by municipality or any other small area is difficult to obtain. Information on income or consumption is generally non-representative for small areas (e.g. the 2002-2003 POF), and data that are representative for small areas do not have information on income or consumption (e.g. the 2000 Census).

The MoPI follows the method proposed by Elbers, Lanjouw and Lanjouw (2003), which estimates household consumption *per capita* using household-level and municipality-level covariates, together with a combination of regression models and Monte Carlo simulations. There are three steps to this method: (i) data analysis to identify comparable variables; (ii) regression analysis based on these common variables found in both the Census and the POF; and (iii) simulations to identify welfare measures point estimates and their confidence intervals, in order to account for differences in the characteristics of households and municipalities.

Poverty was measured using the FGT index. Although the MoPI informed FGT with different α values (0,1, 2), I use $\alpha=0$ or the poverty headcount index. I consider the headcount index appropriate, as I compare poverty with BF participation rates.

Particularly interesting for this thesis is the fact that the MoPI takes into account regional differences. The MoPI divides the Northeast into rural and urban geographical areas with calorie intakes that differ according to demographics and anthropometric information. The Northeast of Brazil, where this thesis is primarily focused, has many different consumption standards and market prices. This dataset regionalises the measurement of poverty in Brazil, a country with large regional differences.

Appendix 3B: The multimodal network dataset and network analysis

As explained in Chapter 3, section 3.2.4, I conducted a multimodal network analysis in order to construct the remoteness variable and to build the PIR and PNIR typologies. This appendix is a step-by-step technical description of how the network analysis was conducted.

The MoPI provided information on the main roads (for 1997) and river networks (for 2000). Because this information was neither comprehensive nor updated, I combined the MoPI with the Digital Integrated Cartographic Base of Brazil at the Millionth Scale (BCIM, version 3.01), released in 2009. Both maps (the MoPI and the BCIM) use Brazil polyconic projection and 1969 South American Datum (SAD69). With the information on roads and rivers updated, I was able to construct multimodal network datasets.

With the multimodal network datasets, I created the variable remoteness by calculating the distance between two points via a series of alternative networks, such as metro, trams, roads, rivers. This thesis used the transportation system of roads, bridges and rivers as constitutive parts of the multimodal network. It is important to mention that inhabitants of the North and Northeast of Brazil still use the river networks as a means of transport.

Appendix 3B is organised as follows. First, I detail how I cleaned-up the dataset. Then, I describe how I built the feature and multimodal network datasets. Finally, I outline the specifications of the network analysis.

Cleaning up the data

Geodatabases have three types of datasets: raster data; feature classes; and tables. This thesis only uses the last two types. For the multimodal network dataset, I used feature class files. Feature classes can be represented as points, lines, polygons and annotations (or texts within the maps).

The information in the MoPI uses the following types of feature classes. Municipalities were represented by polygons that followed the municipalities'

geographical and legal delimitations. Municipality town halls were represented by points within the municipality polygon.

BCIM represents Brazilian ports as multipoint feature files, i.e. as a clustering of points around a specific area. The multimodal network dataset does not accept multipoint features, so I converted from multipoint to one single point[114]. The point indicates where the port is located on a map.

BCIM represents roads as line features. These line features also have information on the types of roads, such as (i) paved, (ii) being paved, (iii) unpaved, or (iv) without paving information. With this information, I was able to create a hierarchy of preferences for classifying the roads, which affected the remoteness variable in terms of time spent for transportation. Considering that the time spent from point A to point B will differ depending on the type of road, it is important to indicate to the software that it should give higher priority to (i) paved roads than (iii) to unpaved roads, for example. The hierarchy was structured as follows: paved roads had higher priority over roads being paved, which, in turn, had higher priority over unpaved roads or roads without paving information. In order to do so, I created a variable and populated it with the following VBA script:

```
Dim temp_variable as Integer
if [cd_tipo_pa] = "Sem Informação" then
temp_variable= 3
elseif [cd_tipo_pa] = "Não Pavimentada" then
temp_variable=3
elseif [cd_tipo_pa] ="Em Pavimentação" then
temp_variable=2
elseif [cd_tipo_pa] ="Pavimentada" then
temp_variable=1
endif
Hierarchy = temp_variable
```

Technical details: creating the feature dataset

The feature dataset merges the different feature classes from MoPI and the BCIM into one dataset. The following technical details inform the specifications of the feature dataset I created: geographic coordinate SAD69 and NGG 1977 South America;

[114] I used Toolbox\Data Management\Feature\Multipart to Singlepart

default tolerance of ArcGIS; XY default tolerance of 0,00000000898312 degrees; z tolerance of 0,001 and M tolerance is 0,001 unknown units.

Creating the multimodal network dataset

The feature dataset provided the information required for the creation of the multimodal network dataset. I assigned networks to two groups, one for roads and another one for rivers. This means that ArcGIS understands that there are two types of alternative networks to choose from when considering going from point "A" to point "B". The roads network included roads, tunnels and overpasses. The rivers network included ports, rivers, ferries and ferry docks. I assigned the connectivity between these networks in such a way that a road would connect to another road or a river only at the end of the line ("end points"), unless there was a port where the path could diverge from road to river, or vice-versa. It is clear, then, that the river and road networks could be used to complement each other.

I assigned no elevation in calculating travelling time. This means that the effect of driving in hills and valleys was not taken into consideration in computing distances. I also allowed for global turns, which means that turns are allowed whenever the "end points" – the edges of types of features – do not connect. For example, the software creates a turn, even if there is no immediate connection between a road and a port. This may underestimate distances, as roads may connect differently than the global turn.

In the multimodal network dataset, I created two new attributes for deciding the shortest route between two points of interest while running the network analysis. First, I created a cost-attribute named "Km", whose value was identical to the length of the corresponding road or river (variable *md_extensao* to two decimal points) (IBGE 2009a). Then, I created a hierarchy attribute, adding rivers to the previous hierarchy. Rivers were given the same preference level as unpaved roads and roads with no paving information. In that way, ArcGIS could use a hierarchy of options in choosing between an advent of various levels of roads, as well as between roads and rivers.

Below is the full specification of the multimodal network dataset:

Name: BCIM301Transport_ND2

Type: Geodatabase-Based Network Dataset

Sources:
Edge Sources:
ST_HIDROVIA_LINHA_ND2
ST_PONTE_TUNEL_ND2
ST_RODOVIA_H_ND2
ST_TRAVESSIA_LINHA_ND2
Junction Sources:
Travessia_ponto_ND2
porto_Point_ND2

Connectivity:
Group 1:
Edge Connectivity:
ST_PONTE_TUNEL_ND2 (End Point)
ST_RODOVIA_H_ND2 (End Point)
ST_TRAVESSIA_LINHA_ND2 (End Point)
Junction Connectivity - Transfer Groups [2]:
Travessia_ponto_ND2 (Honor) - Transfer Groups [2]
porto_Point_ND2 (Override) - Transfer Groups [2]

Group 2:
Edge Connectivity:
ST_HIDROVIA_LINHA_ND2 (End Point)
Junction Connectivity - Transfer Groups [1]:
Travessia_ponto_ND2 (Honor) - Transfer Groups [1]
porto_Point_ND2 (Override) - Transfer Groups [1]

Turns: <Global Turns>

Attributes:
Km:
Usage Type: Cost
Data Type: Double
Units Type: Unknown
Use by Default: True
Source Attribute Evaluators:
ST_HIDROVIA_LINHA_ND2 (From-To): Field - [md_extensa]
ST_HIDROVIA_LINHA_ND2 (To-From): Field - [md_extensa]
ST_PONTE_TUNEL_ND2 (From-To): Field - [md_extensa]
ST_PONTE_TUNEL_ND2 (To-From): Field - [md_extensa]
ST_RODOVIA_H_ND2 (From-To): Field - [md_extensa]
ST_RODOVIA_H_ND2 (To-From): Field - [md_extensa]
ST_TRAVESSIA_LINHA_ND2 (From-To): Field - [md_extensa]
ST_TRAVESSIA_LINHA_ND2 (To-From): Field - [md_extensa]

Default Attribute Evaluators:
Default Edges: Constant - 0
Default Junctions: Constant - 0
Default Turns: Constant - 0

Hierarchy:
Usage Type: Hierarchy
Data Type: Integer
Units Type: Unknown
Use by Default: True
Hierarchy Ranges:
Primary Roads: up to 1
Secondary Roads: 2 - 2
Local Roads: 3 and higher
Source Attribute Evaluators:
ST_HIDROVIA_LINHA_ND2 (From-To): Constant - 3
ST_HIDROVIA_LINHA_ND2 (To-From): Constant - 3
ST_PONTE_TUNEL_ND2 (From-To): Constant - 1
ST_PONTE_TUNEL_ND2 (To-From): Constant - 1
ST_RODOVIA_H_ND2 (From-To): Field - [Hierarchy]
ST_RODOVIA_H_ND2 (To-From): Field - [Hierarchy]
ST_TRAVESSIA_LINHA_ND2 (From-To): Constant - 3
ST_TRAVESSIA_LINHA_ND2 (To-From): Constant - 3
Default Attribute Evaluators:
Default Edges: Constant - 0
Default Junctions: Constant - 0
Default Turns: Constant - 0

The network analysis: closest facility

In network analysis more generally, the function "closest facility" is used to calculate the time or distance to the nearest hospital (facility) for incidents like road accidents. I have adapted this function to this research by defining "incident" as the location of the poor rural municipality, and "facility" as the location of the urban municipality, thus, enabling the software to calculate the "closest" urban municipality to a given poor rural municipality.

Details on the specifications of the software calculation are as follows. For distances between the facilities and the incidents, I have determined that there is no curb approached. This means they can be approached from any side (right or left) of the road or river. I set the tolerance (or the distance) to identify facilities and incidents within five kilometres, i.e. ArcGIS links the road or port to a certain urban or rural

municipality if it comes within five kilometres of it. I set the analysis to find only one urban municipality for each rural poor municipality. Locations that ArcGIS could not identify, even considering the five-kilometre range of tolerance, were ignored. I have not determined any default cut-off value, so a facility could be a long way away from an incident. Lastly, the calculations included the use of the hierarchy attributes described previously (paved roads > roads being paved > unpaved roads/without information/rivers).

Appendix 3C: Data management: identification of the municipality code in the Ministry of Education dataset

Merging the datasets

The data management of the quantitative analysis used several administrative datasets in various formats (GIS, dta, spss, xls and html), and the analysis used a number of different types of software (ArcGIS 9.2, STATA10, SPSS16.0 and Excel 2007). Hence, there is a need for this appendix to explain how I derived the code from the municipality characteristics.

Given the need to merge databases several times, I was careful with every merge. For all datasets except the Ministry of Education dataset, I had the unique identifier code for the municipalities. I conducted the first merge of the master data using this code in two different software packages (SPSS 16.0 and STATA10), and compared the results. I used STATA to conduct the remainder of the analysis. In STATA, I used the code _merge(newvar) to produce a new variable identifying observations that were merged, those that were present only in the master data, and those that were present only in the using dataset. I checked the missing variables by running cross-tabs and other commands, such as "assert" and "inspect". When changing the variable from string to numerical, I was careful to produce two other variables to check the result. I kept the original variables (labelled as "source"). More information, including STATA commands, can be produced upon request.

The Ministry of Education (MEC) dataset

In order to populate the MEC dataset with the unique municipality identifier code, I used information from the MoPI dataset. The MoPI had the following variables: *code* (unique municipality identifier), *state*, and *name* (of the municipality). The MEC dataset had the variables *state* and *name*. I created a new variable (*state_name*), combining the string variables *state* and *name*. This variable was also used as a unique identifier, because no two observations were the same, given that each municipality had its full name. I created this variable in both datasets (MoPI and MEC). I then populated the MEC dataset with the field *code* by comparing the

state_name variables in one dataset with those of the other (see details below). After the MEC dataset had been populated with the *code* variable, I was able to proceed with the merging of the MEC dataset with the master data, as outlined in the previous section.

Details for the computations to derive the *state_name* municipality are as follows (in Excel):

1. With CONTROL+FIND, I deleted all accents, e.g. transforming Ç into C;
2. Using function UPPER, I capitalised all strings of *state* and *name*;
3. Using the function CONCATENATE, I created the variable *state_name*;
4. Using the function VLOOKUP, FALSE, I matched the variable *state_name* in two spreadsheets based on the MEC and MoPI datasets, to populate the MEC spreadsheet with the variable *code* from MoPI;
    a. The command FALSE means that Excel matches *state_name* exactly.
    b. Close matches were not assigned any value for *code*. I did not drop these cases.

Table 15 indicates the number of MEC observations in the master data:

Table 15: Number of PIR and PNIR observations per year

	2007	**2008**	**2009**	**2010**
PIR (N=101)	88	98	101	101
PNIR (N=283)	237	264	278	280

Source: author's using MoPI and BCIM.

Appendix 3D: Exploratory data analysis

Missing values

Missing values take the form of ".", ".z" and ".a". When the original dataset has missing values as ".", I used the same form. Some of the values were assigned to missing, during the merging process. This happened when the merging dataset did not have the same number of municipality as the master dataset.

I used the ".z" and ".a" codes when the "0" and "99" codes in the original dataset indicated "missing" variables. If the original dataset had "0" or "99" as values for observations, I took care to double-check whether these numbers were indeed values of 0 or 99, or whether they were codes for missing values. For example, the *Datasus/Sisvan* dataset has 0 and 99 values, and I have kept these as values, not as missing values. Enforcement of the monitoring of the BF began in 2006, and it is reasonable to assume that, prior to that date, a 0 value meant there was no monitoring. This is confirmed by the fact that there is a substantial reduction of the number of 0 values over time, indicating that monitoring has started to take place. I have kept 99 as a value when it is followed by decimal points (e.g. 99.01; 99.75). In these cases, 99 is clearly not being used for missing values.

Exploratory Data Analysis: Treatment of outliers

The exploratory data analysis revealed problems with the dataset. Aside from some observations that were clearly implausible or even impossible (e.g. values > 100%); it was sometimes difficult to ascertain whether the true data were really skewed, or whether they were a result of errors at the inputting, reporting or calculation stages.

It is important to remember that the Bolsa Família from 2004 to 2006 brought together beneficiaries from other programmes and other databases. This can lead to error. In addition, I cannot verify the quality of the other databases added to the *Cadastro*.

It could be that the high number of outliers from 2004 to 2006 is a reflection of a poor quality *Cadastro*. It is documented in my interviews and the literature (Soares 2012a)

that the *Cadastro* dataset was not constantly updated during its first years, and it was therefore "messy". As a result, in 2006 the federal government began to transfer funds to local administrations, via the IGD (*Índice de Gestão Descentralizada*), for the purpose of partially paying the administrative costs of running the programme. The IGD is a performance-based financial incentive with four indicators, two relating to the monitoring of conditionalities, and two relating to *Cadastro* quality. So the high number of outliers in the data for the years 2004 to 2006 could be a reflection of a poor quality *Cadastro*.

Lastly, I would like to acknowledge that the number of outliers could also be the result of errors in calculating the participation rate. Problems with the population estimates as part of the denominator of the equation have already been explained in Chapter 3, sub-section 3.3.2 and in Chapter 4, footnote 84.

Table 16 illustrates the range of the variable "participation rate" from 2004 to 2009, using "municipality" as the unit of analysis.

Table 16: Range of the variable participation rate (non-winsorised), 2004-2009

Year	Minimum Participation Rate (%)	Maximum Participation Rate (%)
2004	.0083658	63.54296
2005	.3544287	83.75954
2006	1.001381	198.676
2007	.3036876	85.94781
2008	.1976006	82.25311
2009	.1981599	90.30988

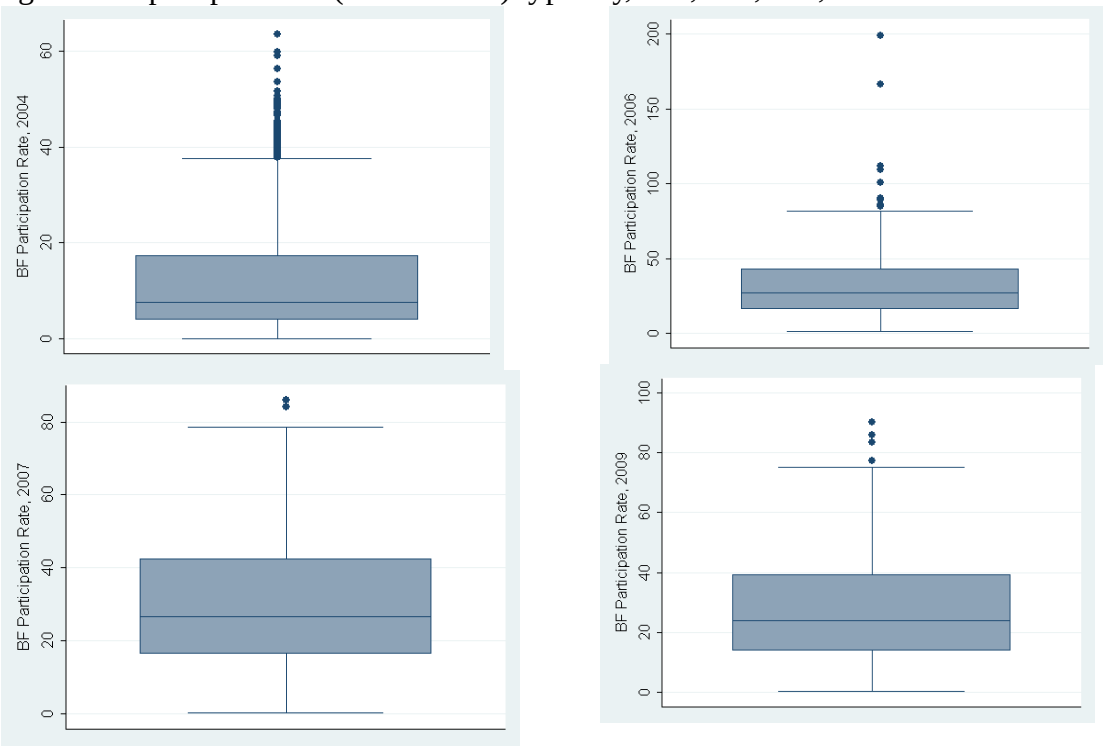
Source: author's calculation using MoPI, BCIM, PNADs (2004, 2005, 2006, 2008, 2009), *Contagem populacional* (2007), *Cadastro* (2004 – 2009).

The ranges of the minimum and maximum participation rates give us some idea of how implausible certain values are. The minimum participation rate for the years 2004 to 2009 is 0.008% in 2004, and the maximum participation rate is the impossible value of 199% in 2006. The minimum participation rates from 2004 to 2009 are extraordinarily low, i.e. well below 1% (except for 2006). Although these minimum ranges could be hypothesised to belong to rich municipalities with few households in the programme, these results strongly suggest the need for further

investigation. I define outliers using quartiles and a multiplier for the inter-quartile ranges (Agresti & Finlay 2009; High 2000).

Figure 38 shows various box-and-whisker plots and outliers. There are large numbers of outliers in the years 2004 to 2006. From 2007 onwards, the number of outliers is significantly reduced (as expected).

Figure 38: BF participation rates (non-winsorised) by poverty, 2004, 2006, 2007, 2009



Source: see Table 17 for details.

High (2000) suggests dividing outliers in two types: potential and problematic. Potential outliers are those observations above or below the 1.5 inter-quartile range (IQR), and problematic outliers are those of 3.0 IQR. Table 17 shows the numbers of observations classified as potential outliers, and those classified as problematic. It is worth noting the considerable improvement in the distribution. From 2007 onwards, the data show zero missing values and a considerable reduction in the numbers of outliers.

Table 17: Number of problematic and potential outliers, BF participation rates, 2004-2009

	Potential Outliers	Problematic Outliers
2004	105	3
2005	25	0
2006	10	2
2007	2	0
2008	3	0
2009	4	0

Source: see Table 17 for details.

It is worth investigating whether the outliers are randomly allocated, or whether the high participation rates are consistently occurring in the same municipalities. If the latter is the case, it is plausible to think that this could represent a rare event, i.e. a very poor municipality with a very high level of participation in the programme. And indeed, analysis of the problematic outliers reveals municipalities with consistently high participation rates over two or more years. There is, therefore, the possibility that these outliers are legitimate cases of high participation rates, meaning they are a non-outliers – a type I error, or a false positive.

The problematic results in 2006, where two municipalities had participation-rate values of 166% and 198% indicate problems with the data. These results could be a combination of the exponential increase in BF benefits in 2006, and the problems with municipality population estimates already identified (Chapter 3, sub-section 3.3.2). Comparing the 2006 participation rates of these two municipalities with the rates in the preceding and following years, shows the participation rate trends returning to normal levels, i.e. they no longer belong in the outlier group.

Instead of excluding outliers, I decided to winsorise the dataset. Winsorising a dataset imposes a limit on the top and bottom percentiles of the distribution. I chose the 3rd and 97th percentiles. I decided to keep outliers in the dataset as municipalities with high participation rates, where poverty levels may also be high, are the central theme of the research question investigated in Chapter 4.

Appendix 3E: Description of variables

Descriptive statistics for continuous variables:

Variable	Obs	Mean	Std. Dev.	Min	Max
Poverty (FGT)[1]	5501	0.41	0.15	0.05	0.84
BF participation rates (PR), 2004 (%)[2]	5409	11.37	9.52	0.86	34.89
BF PR 2005 (%)	5485	20.09	11.89	3.54	46.13
BF PR 2006 (%)	5501	29.76	16.32	5.88	63.04
BF PR 2007 (%)	5501	29.17	15.32	5.91	58.07
BF PR 2008 (%)	5501	27.50	14.85	5.35	55.59
BF PR 2009 (%)	5501	26.54	14.54	5.01	54.06
Distance/ remoteness (km)[3]	384	47.43	64.85	1.62	766.77
Health conditionalities, Jun 2005 (%)[4]	5501	10.37	24.83	0	100
Health conditionalities, Dec 2005 (%)	5501	40.78	38.69	0	100
Health conditionalities, Jun 2006 (%)	5501	48.10	37.78	0	100
Health conditionalities, Dec 2006 (%)	5501	42.29	35.05	0	100
Health conditionalities, Jun 2007 (%)	5501	49.20	31.65	0	100
Health conditionalities, Dec 2007 (%)	5501	52.95	30.85	0	100
Health conditionalities, Jun 2008 (%)	5501	65.99	24.32	0	100
Health conditionalities, Dec 2008 (%)	5501	64.89	25.52	0	100
Health conditionalities, Jun 2009 (%)	5501	70.99	20.55	0	100
Health conditionalities, Dec 2009 (%)	5501	74.40	19.21	0	100
Health conditionalities, Jun 2010 (%)	5501	76.24	18.40	0	100

Sources: (1) MoPI; (2) PNADs (2004, 2005, 2006, 2008, 2009), *Contagem populacional* (2007), *Cadastro* (2004-2009); (3) MoPI, BCIM; (4) *Datasus/Sisvan* (2005-2010).

Descriptive statistics for poverty:

Variable	*Obs*	*Mean*	*Std. Dev.*	*Min*	*Max*
Poverty general	5501	0.41	0.15	0.05	0.84
Poverty RURAL	2093	0.41	0.16	0.06	0.84
Poverty URBAN	3408	0.40	0.15	0.05	0.82
Poverty PIR	101	0.62	0.06	0.57	0.84
Poverty PNIR	283	0.62	0.04	0.57	0.81
Poverty Other (not PIR/PNIR)	5117	0.39	0.15	0.05	0.82
Poverty, North	449	0.44	0.13	0.15	0.84
Poverty, Northeast	1786	0.55	0.09	0.14	0.81
Poverty, Centre-West	446	0.40	0.10	0.1	0.81
Poverty, Southeast	1665	0.33	0.13	0.05	0.76
Poverty, South	1155	0.29	0.10	0.07	0.56

Sources: MoPI and BCIM.

Appendix 3F: Using the quantitative dataset to inform the selection of case studies

As explained in Chapter 3, sub-section 3.4.1, I used the quantitative dataset (MoPI) to inform the selection of the four case studies, with the aim of identifying typical case studies (Table 5, p. 105). I used variables related to the BF programme, such as those related to income, education and health. Median income influences the number of beneficiaries potentially eligible for the programme. Education and health indicators give information on the level of access and service provision, portraying the infrastructure against which beneficiaries need to comply with conditionalities. Providing a picture of a typical case study in order to analyse the BF implementation and its impact in PIR and PNIR municipalities, then, involved selecting case studies that fell within the central tendency of income, education and health indicators.

The choice of outcome indicators was dictated by their availability in the dataset. Table 18 outlines the criteria used to select case studies for PIR and PNIR municipalities. This appendix outlines the descriptive statistics of these outcome indicators by PIR and PNIR municipalities. These indicators, by themselves, provide very useful information about the conditions in which the BF operates in poor rural municipalities.

Table 18: PIR and PNIR criteria for case study selection

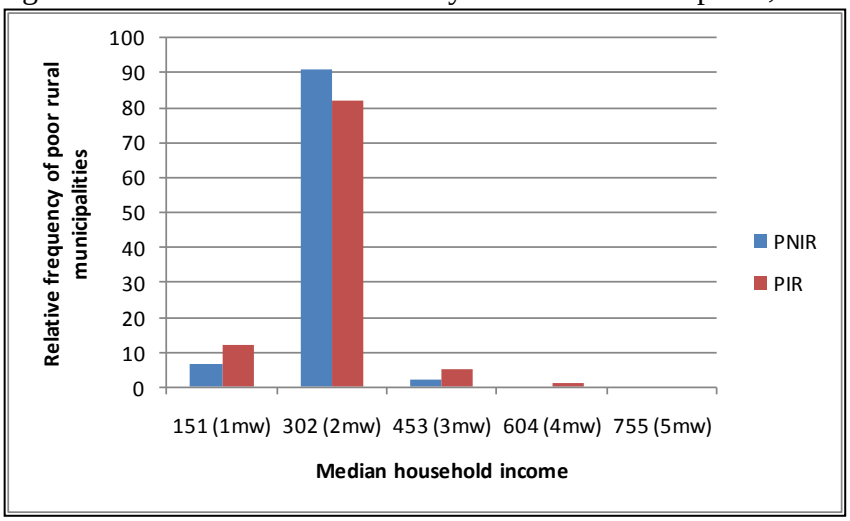
Indicators	PIR criteria	PNIR criteria
*Median **income***	R$151 - 302	R$151 - 302
***Education**: age/grade gap*	61-75%	61-75%
***Education**: Multi-grade classrooms*	26-50	0-10
***Education**: Literacy rates*	61-70%	61-70%
***Education**: %pop with less4yof study*	61-80%	41-60%
***Education**: average years of study*	2.1 -4	2.1 -4
***Health**: #beds/1,000 pop*	0 - 0.5	0 - 0.5
***Health**: #medical positions/1,000 pop*	0 - 0.5	0 - 0.5

Source: author using MoPI, BCIM.

Distribution of median income in PIR and PNIR municipalities

Figure 39 shows the sampling distribution of median household income in PIR and PNIR municipalities. The data indicate that the average median household income in both PIR and PNIR municipalities is around two minimum wages.

Figure 39: Distribution of median income by PIR and PNIR municipalities, 2000



Source: author's calculations using MoPI and BCIM.

The distribution of PIR municipalities shows a higher frequency below the threshold of two minimum wages, as well as a longer tail. The inequality in Brazil makes it possible to have rural municipalities defined as poor on a poverty headcount (PIR), which simultaneously have a comparatively higher median household income.

Distribution of education outcome indicators in PIR and PNIR municipalities

The MoPI provides information on five education indicators based on the 2000 Census:

(i) **age/grade gap**: the percentage of students per grade (or year of study) who are older than the age recommended by the IBGE, according to the ages students should be in 1st to 8th grades if they started school at seven;

(ii) **multi-grade classroom:** the number of schools with only multi-grade (or multi-level) classrooms;

(iii) **literacy rate**: the percentage of literate adults (above the age of 15), defined by the IBGE as those who self-report that they are able to read or

write a simple note, and those who learned to read and write but have forgotten, and those who can only write their name[115];

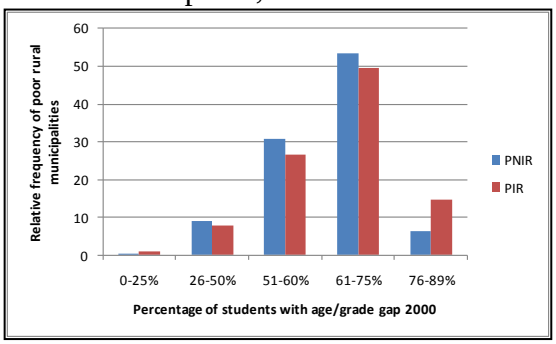
(iv) **average years of study**: calculated for individuals over 15;

(v) **percentage of the population with less than four years of study**: also calculated for individuals over 15.

The Figures below show the distribution of these indicators per type of poor rural municipality.

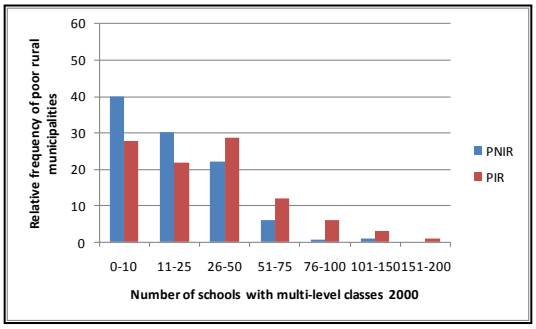
[115] This indicator may not be reliable due to its conceptualisation. Although individuals 15 years or over should have concluded the eight years of basic education (recently increased to nine), the measurement of literacy does not reflect the number of years of study. In addition, "literacy" includes the bare minimum standard of knowing how to "write" their own names or, as I heard it described during fieldwork, how to "draw" their own names.

Figure 40: Distribution age/grade gap by PIR and PNIR municipalities, 2000



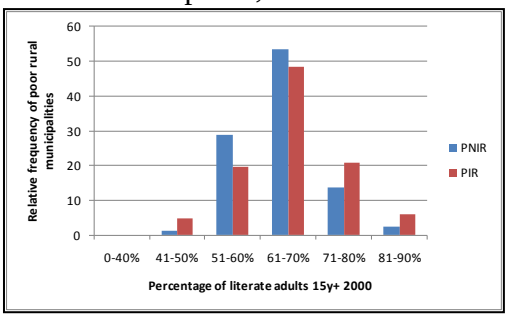
Source: author's calculations using MoPI and BCIM.

Figure 41: Distribution of multi-grade classrooms by PIR and PNIR municipalities, 2000



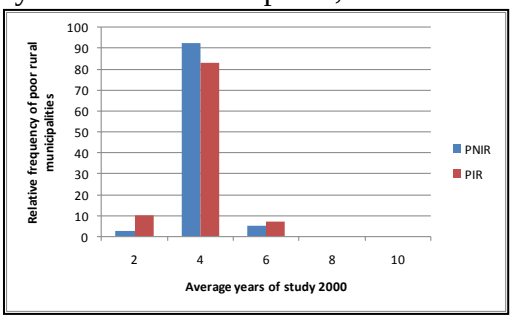
Source: see Figure 40 for details.

Figure 42: Distribution of literacy rate by PIR and PNIR municipalities, 2000



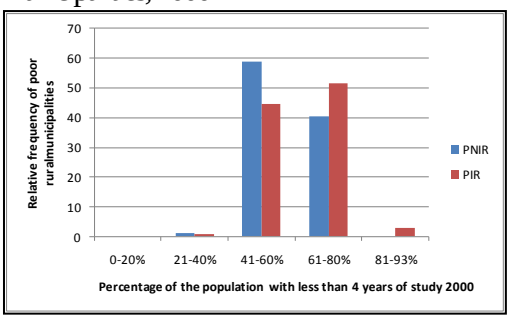
Source: see Figure 40 for details.

Figure 43: Distribution of average years of study by PIR and PNIR municipalities, 2000



Source: see Figure 40 for details.

Figure 44: Distribution of the population with less than four years of study by PIR and PNIR municipalities, 2000



Source: see Figure 40 for details.

The above distributions provide evidence that the education outcome indicators in all PIR municipalities are worse than those in PNIR municipalities. This substantiates the premise that PIR municipalities, with weaker links to urban municipalities, have higher levels of deprivation.

It is important to point out that I was not able to select PNIR case studies that would fit the distribution of the multi-grade classrooms and all of the other indicators. I

reached a compromise by selecting two PNIR municipalities with two and three additional schools with multi-grade classrooms. I believe that this does not represent a major problem, because the range of distribution of multi-grade classrooms varies from 0 to more than 100. I was also not able to select case studies that fitted the distribution for the PIR "i" population with less than four years of study. However, the percentage of people with less than four years of study in this population was only slightly less than the bottom threshold (60.4% and 61% respectively).

Distribution of health outcome indicators in PIR and PNIR municipalities

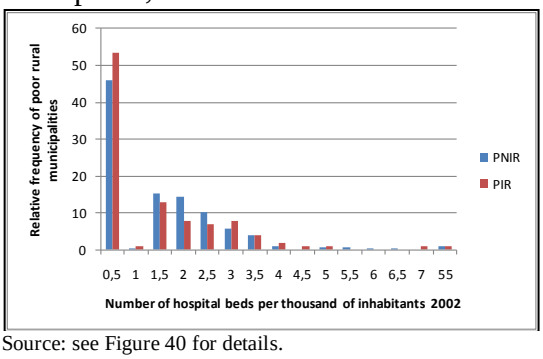
The MoPI provides information on two health indicators based on the 2000 Census:

(i) **beds per thousand inhabitants**: number of hospital beds, either public or private, per thousand inhabitants in a municipality;

(ii) **medical positions created**: number of positions created for doctors in health clinics and hospitals, public and private, per thousand inhabitants in a municipality.

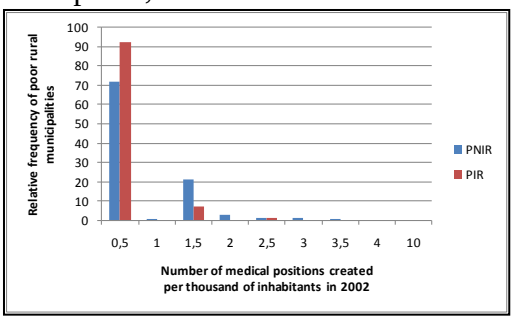
The Figures below show the distribution of these indicators per type of poor rural municipality.

Figure 45: Distribution of hospital beds per thousand inhabitants, PIR and PNIR municipalities, 2000



Source: see Figure 40 for details.

Figure 46: Distribution of medical positions created per thousand inhabitants, PIR and PNIR municipalities, 2000



Source: see Figure 40 for details.

Although both figures show that PIR municipalities fare worse than PNIR, there are some limitations to the indicators and their definitions. These indicators reflect the

availability of health services per thousand inhabitants, but they do not show the health status of the population, like other indicators such as child mortality[116].

The number of hospital beds provides information on the infrastructure of the health sector in both public and private hospitals. However, this is not an accurate indication of health resources for those who depend only on public hospitals. As for the number of medical positions, the fieldwork found that the IBGE measure may be double-counting the doctors who work part-time in more than one municipality, thus providing an inaccurate measurement of the coverage of the population by health services.

[116] I was not able to include child mortality indicators because the 2003 MoPI does not have this information by municipality, but aggregates it into meso-regions. The problem with using the meso-region information is that it represents an average of child mortality, thus abolishing any distinction between PIR and PNIR statistics, deemed important for this research.

Appendix 3G: Protocol observations

Protocol observation: driving to rural areas

Date: ____/_____/_____

Municipality:_____District/*Povoado*:_____

Typology: PIR PNIR

ID: OP/RA/_____/_____

While driving to the <u>rural areas</u>, observe:

Road Conditions:

Distance from city (CRAS) to rural areas:

Min (entrance to rural areas):

Max (farthest house):

Distance from rural areas to rural school:

Min (closest house):

Max (farthest house):

Protocol observation: interview in schools

Date: ____/_____/_____

Municipality:_____District/*Povoado*:_____

Typology: PIR PNIR

ID: OP/SCH/____/_____

While interviewing principals/teachers <u>schools</u>, note:

School Name:

☐ **Public State** ☐ **Private** ☐ **Public Municipal**

Infrastructure – physical space:

Building:

Sports ground:

Infrastructure – classroom (chairs, table, blackboard):

Infrastructure – accessibility:

Hygiene/bathrooms:

Ask about:

Infrastructure – lighting and ventilation:

Electricity:

Telephone: Y N **Fax: Y N** **Computers: Y (#...) N**

Internet : Y N

Security :

Library :

Pedagogical materials :

Number of children per class :

Number of teachers?

_____Men **_____Women**

_____hours/week **_____ Public staff or contractor**

Educational level: Graduate ( ) High school ( ) Finishing graduate studies( )

Does the school take part in the Food Acquisition Programme (*Programa de Aquisição de Alimentos para Atendimento da Alimentação Escolar* – PAA)? [This question aims to find out if the school purchases food from the local producers]

( ) Yes ( ) No

Protocol observation: interview in health centres

Date: ____/_____/_____

Municipality:_____District/*Povoado*:_____

Typology: PIR PNIR

ID: OP/HC/____/_____

While interviewing head nurses at <u>health centres</u>, note:

Health Centre Name:

Opening and closing times:

Accessibility for rural people:

Information on location neighbourhood:

☐ **Rural H. Centre** ☐ **Hospital** ☐ **Urban Health Centre**

Infrastructure – physical space:

Building:

Seating area:

OBS (hygiene, etc):

Ask about:

Estimated waiting time _____ estimated number of visits per day_____

Complete *Programa Saúde da Família* staff ? Yes or No

( ) # doctors: ( ) # GPs ( ) # Specialist

( ) # dentists ( ) # nurses ( ) # nurse technician ( ) # community health agents

( ) # beds ( ) # ambulance ( ) # computers ( ) internet connection

( ) local distribution of free medicine ( ) Free milk distribution programme (*PAA-Leite*)

Protocol observation: interview at the Social Assistance Centre (CRAS)

Date: ____/_____/_____

Municipality:_____District/*Povoado*:_____

Typology: PIR PNIR

ID: OP/CRAS/_____

While visiting <u>CRAS</u>, note:

CRAS Name:

Location: ☐ **Rural** ☐ **Urban**

Opening and closing times:

Accessibility for rural people:

Information on location neighbourhood:

Infrastructure – physical space:

Building:

Rooms:

Seating area:

Ask about:

Computers:

Cars ( ) Motorbikes ( )

Internet (connection speed above 512 kbps):

Staffing numbers:

( ) Coordinator: ( ) Graduate level? ( ) Public staff/contractor ( ) Previous experience?

( ) Social assistant: ( ) Graduate level? ( ) Public staff/contractor ( ) Previous experience?

( ) Psychologist: ( ) Graduate level? ( ) Public staff/contractor ( ) Previous experience?

( ) #Technicians: ( ) Graduate level? ( ) Public staff/contractor ( ) Previous experience?

Appendix 3H: Service profiling information

Date: ____/_____/_____

Municipality:_____District/*Povoado*:_____

Typology: PIR PNIR

ID: HH/_____/____

	Distance (km)	Distance (Time)	Type of Transportation	Conditions of Roads	Transportation Costs	Frequency
School **1st to 5th grades** **6th to 9th grades**			Public Private	Paved Being paved Dirt road		
School - High school			Public Private	Paved Being paved Dirt road		
Health			Public Private	Paved Being paved Dirt road		
CRAS			Public Private	Paved Being paved Dirt road		
Distance to their work			Public Private	Paved Being paved Dirt road		
Where do they collect the benefit?						
Post office						
CAIXA						

Appendix 3I: Household reference sheet

Date: _____/___/_____

Municipality:_____District/*Povoado*:_____

Typology: PIR PNIR

ID: HH/_____/_____

Name (optional):	**Age:**	**Occupation:**
Married? Y N	**Does the husband live at home?**	**# sons/daughters:**
Education level:		

Registered at *Cadastro*:	**Since when?**
Do you receive the BF?	**Since when?**
Amount of the benefit:	
If not registered, why not?	
Do you have the BF card?	**[Mark if I have seen it: ___]**
Are the children's vaccination cards up to date?	

Water:	Rubbish collection:
Sanitation:	Cook with (gas/firewood):
Electricity:	Livestock:
Own house/rent/*morador?*	# people/house:
Any pensioner?Y N How many?	Est. Income:

Ask about children:

	Name	Your own child?	Does the child have documents?	Age	Health status	School grade this year	School grade last year	Repeated the grade? How many times? When?	Work?	Full time?
01									Y N	
02										

CHAPTER 8 APPENDIX

Appendix 8A: Reasons for low school attendance, Ministry of Education

Below is listed all the declared reasons for low school attendance. The Ministry of Education (MEC) periodically updates these reasons. I also list the 2010 reasons, as I have information up to that date. This information is based on the system user-manual version 4.6 (MEC [n.d.]-b).

Student's illness: including reasons to preserve health, such as post-partum periods. The school can request a doctor's letter in case of doubt. If illness is reported constantly, the school must involve the local health clinics in the specific case.
Family's illness or death
Shortage of supply of school services: children's education, Youth and Adult specialised education (EJA), high-school services, schooling services for resettlements, *etc*.
Factors that impede access to school: e.g. floods, calamities, lack of transportation, urban violence.
Lack of supply of school services for persons with disabilities or special needs: this includes lack of specialised teachers and lack of transportation
Finished high school
Suspension
Youth and Adult specialised education (EJA): some of the EJA courses do not have an attendance requirement.
Pregnancy
Homelessness: the school must inform local child protection services and CRAS.
Parents' negligence: the school's perception of the importance of education for families. The school must conduct parent-teacher meetings to raise awareness of the importance of

education.
Child labour: it is illegal for children below the age of 14 to work. It is the school's legal duty to inform the authorities, and failing to do so is a criminal offence.
School has not said what the reasons are: school does not know the reasons for low attendance.
Reason not listed: school must attach a short description of the reason for low school attendance.
Violence, discrimination and aggression at school: including cyber-bullying.
Youth employment: according to the Brazilian legislation, the starting age for work is 16. From 14 to 16 years, teenagers can work as apprentices.
Exploitation, sexual abuse and domestic violence: the school must inform local child protection services.
Lack of interest or motivation: only registered after-school counsellors have identified this as the reason for low school attendance. School services must act promptly as there is a high risk of drop-out.
Drop-out
Need to care for family members: including parents, sons/daughters or relatives. The school must inform local child protection services and CRAS.